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Guidance Documents

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1 UNITED STATES OF AMERICA
2 NUCLEAR REGULATORY COMMISSION
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4 WORKSHOP ON REVISED LICENSE
5 RENEWAL GUIDANCE DOCUMENTS

6 + + + + +
7 WEDNESDAY,
8 MARCH 2, 2005
9 + + + + +
10 ROCKVILLE, MARYLAND

11 + + + + +
12 The workshop convened at the Nuclear
13 Regulatory Commission, One White Flint North, Room 0-
14 1F16, 11555 Rockville Pike, at 8:00 a.m., Chip
15 Cameron, Facilitator, presiding.

16 NRC STAFF PRESENT:

17	CHIP CAMERON, ESQ.	Facilitator
18	FRANK GILLESPIE	Deputy Director, Division
19		of Regulatory Improvement
20		Programs (DRIP)
21	P.T. KUO	Program Director, License
22		Renewal & Environmental
23		Impacts Program (RLEP)
24	KENNETH CHANG	RLEP
25	KURT COZENS	Senior Materials Engineer

1	JERRY DOZIER	Coordinator, License
2		Renewal Program
3	AMY HULL	NRR/RLEP
4	MARK LINTZ	Program Manager, License
5		Renewal Program
6	<u>PRESENTERS:</u>	
7	FRED EMERSON	Project Manager, License
8		Renewal Issues, NEI
9	PARTHA GHOSAL	Southern Nuclear Company
10	MICHAEL B. KAPLOWITZ	Westchester Co. Legislator
11	DAVID LOCHBAUM	Union of Concerned Scientists
12	MIKE MACFARLANE	Southern Nuclear Company
13	FRED POLASKI	Exelon Nuclear
14	STEVEN SCHELLIN	Nuclear Management Company
15	ROGER STEWART	Progress Energy
16	DAVID WOOTTEN	Dominion Resources
17	SUSAN ZIMET	Ulster County Legislator
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P-R-O-C-E-E-D-I-N-G-S

8:01 a.m.

DR. KUO: Well, let's start. Good morning, ladies and gentlemen. My name is P.T. Kuo, the Program Director for the License Renewal and Environmental Program. I would like to first welcome you this morning and thank every one of you for taking time out to come here. I know you are all busy. I really appreciate it. This is very important to us. The purpose of today's meeting is to solicit your comments on the revision of a set of guidance documents we've been using for license renewal review.

These are the draft documents of the revised documents that was issued and placed on our website on January 31, 2005. The comment period is going to close on March 31, 2005. This document includes Standard Review Plan (SRP) for License Renewal, a technical basis document entitled "Generic Aging Lessons Learned" or "GALL Report," and our Reg Guide 1.188 on forming content for license renewal application.

Over the past four years the staff has performed many license renewal application review using these documents and we have gained considerable experience from these past reviews. To provide better

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1 review guidance for our staff reviewers, we undertook
2 the task to revise these documents by incorporating
3 many of the past lessons learned into the original
4 document, which was published in July 2001. We expect
5 the revised documents will make the license renewal
6 process more effective and more efficient.

7 Today, you are here for presentations from
8 our staff. Jerry Dozier, who is leading this effort,
9 will give you an overview of the whole project. It
10 will be followed by Kurt Cozens, who will make a
11 presentation on the summary of the changes that we
12 made in the Standard Review Plan for License Renewal,
13 and the next presentation will be given by Dr. Amy
14 Hull, who is going to provide a summary of the changes
15 made in GALL.

16 And I would like to thank Dr. Hull,
17 because she is the loaner from Argonne National Lab
18 and she has been very valuable to us in terms of
19 working on this document. I really appreciate it. I
20 want to thank her for her efforts. And the last
21 presentation will be given by Mark Lintz, who is going
22 to talk about changes in our Reg Guide 1.188.

23 For this meeting, we have also invited Mr.
24 Chip Cameron of our legal staff who is going to serve
25 as a facilitator for the meeting. As you probably all

1 know that Mr. Cameron has been serving as the
2 facilitator in numerous public meetings like this and
3 I'm sure he will make sure that everyone has some
4 chance to express their views. I appreciate it and
5 because Mr. Cameron had to rearrange his busy schedule
6 to be here today, and thank you, Chip.

7 Before I turn the meeting to Chip, I would
8 also like to ask Frank, Mr. Frank Gillespie, who is
9 the Deputy Director for the Division of the Regulatory
10 Improvement Programs, to give us a few remarks. So,
11 Frank?

12 MR. GILLESPIE: Yes, how many people were
13 here in this room in November when Jerry had his last
14 meeting? Okay. So this will make more sense to you
15 than the people who weren't, but I think I can make it
16 make sense. At that meeting, I came in at the end and
17 P.T. looked ultimately shocked at my comments, because
18 I didn't practice them with him in advance. One of
19 the things I said was that we're kind of entering a
20 new era with the change and things like the hearing
21 process, which we got many comments from public
22 interest groups up at Millstone on and other places.

23 That the need to one, standardize and two,
24 have the most complete application up front with a
25 good solid technical basis is going to become more and

1 more important for about the next six years. I say
2 the next six years, because it's six sites a year for
3 six years is 36 sites and that kind of finishes
4 everybody. So we've kind of got a six year plateau
5 yet to work off.

6 This document takes a big step and it's
7 not just GALL, it's the Encyclopedia Britannica that
8 we're slowly recreating here and there's a new
9 document now. There is a Bases Document which I think
10 Jerry is going to or Amy is going to talk about a
11 little bit when they talk. And one of the lessons
12 learned in the pilot plants and I have to thank the
13 pilot plants, because we couldn't have focused on what
14 we could achieve and standardization and then have the
15 Bases Document without them having voluntarily,
16 although they would say I kind of had a meeting and
17 said the next three guides are pilots, but at least
18 not fighting being pilots.

19 But Farley stepped up even though we
20 caught them at the last minute. ANO had a little more
21 time, did a little more. D.C. Cook did a little more
22 and then I have to compliment Dominion as our fourth
23 pilot, if you would, who took it to the next extreme
24 and I think I've talked the statistics before.
25 Roughly we went from GALL standardly talking about

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1 covering about 40 percent of Chapter III, which is the
2 Aging Management Program and basic need of an
3 application, to at Millstone demonstrating that if we
4 look at the decisions we've already made in the past
5 and don't say we want to keep remaking them, it could
6 cover up to 90 percent.

7 And so those plants really did demonstrate
8 how far we might be able to go in standardizing the
9 application. But then also in trying to be a little
10 more public with the basis. One of the other lessons
11 learned we had was when we looked back over these was
12 that sometimes we had the same decision and different
13 reasons why it was okay each time. And what we really
14 need to do is start solidifying the technical basis
15 for each decision, and that's what we're trying to do
16 a little bit in the Bases Document, trying to pull
17 that together.

18 That way in the future if someone asks to
19 do something different or we would, let's say, get
20 challenged in a hearing or actually, I think, GALL is
21 going to live past license renewal, because it is
22 becoming a repository for Aging Management Programs
23 that are appropriate for certain materials, components
24 and environments. So it's really becoming the aging
25 management database and it's going to last forever and

1 it's going to end up going through continual updating
2 as operating experience informs us of different
3 things.

4 So, therefore, I think it's a very
5 important document, not just for making the system
6 easier, more effective and more standard, because the
7 more standard we get, the fewer times we try to make
8 the same decision twice, but also it's going to allow
9 for more public scrutiny, which is why I think it's
10 important to have the basis there, so that if we do
11 get challenged on a decision, which I know we haven't
12 really yet, that someone can actually pull the string
13 and say well, why is that the criteria. And that was
14 a piece that, I think, had been missing out of the
15 Encyclopedia that was kind of important to catch up on
16 before we got too far down the road.

17 So I welcome comments from everybody and
18 I hope you are active on it. We did sneak in to GALL.
19 I guess, you, from your perspective, I'll get in your
20 shoes. Those guys did it again. There are some
21 interim staff positions which got snuck into the
22 document. They weren't snuck. It was deliberate.
23 They have been there. They have been hanging around.
24 We have been beating them up for a while. And, in
25 fact, they do represent the staff's best thinking of

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1 what they would accept.

2 And when we thought about this document
3 being used by the summer class, as the first class,
4 even though it's still in draft, we felt the real
5 term, the near term licensees in the summer and the
6 fall deserved to know what the staff viewed as an
7 acceptable safety position on something. And so
8 there's a plant-specific reason to include it in and
9 get comments on those things right now and let's just
10 get them settled. And then if we still want to talk
11 about generically you disagree with that position,
12 then I need to suggest that we continue to separate
13 the plant-specific and what an applicant, who is a
14 real applicant, needs from the generic arguments.

15 And I think the plant-specific guy, the
16 guy who is coming in with an application in three or
17 four months needs to know, you know, what does the
18 staff really think, what do they think is acceptable?
19 This set of documents is also a speed limit on both of
20 us, because the staff is putting down its position.
21 If we're going to change our position, we need to have
22 a basis for why we're changing and it has to be
23 technically solid.

24 On the other hand, if you don't like our
25 position, you need to have a technical basis to say

1 why our technical basis is wrong. So less important
2 to me is the answer than the underlying engineering
3 behind the answer. And that's again why I think the
4 basis piece of this was an important aspect to add in
5 right now.

6 I do appreciate everyone here and again
7 thank you for the pilot plants and I do thank
8 Dominion. I throw them in as the third pilot, because
9 they built on the first three and showed what we can
10 do. And I'm going to suggest that our Advance Reactor
11 Program depends on the outcome of this process today.
12 The more standardization we can get and the more we
13 can do with the teams and things that we go out with
14 in the standard part of the process, the more you're
15 not tying up the staff technical experts to look at
16 exceptions to things like GALL, which means they don't
17 have to work on this aspect of the industry's issues.
18 They can work on some other aspect, which is going to
19 tend to be advanced reactors.

20 So I'm going to suggest that it is in the
21 prejudicial interest of the nuclear industry in the
22 U.S. to make this system as standard as possible. The
23 other thing you want also, because we're only a fixed
24 agency and we're only a certain size, we're not going
25 to get unlimited growth, so these two programs kind of

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1 interact, you might say, on top of the main program,
2 which is the safety of the current operating fleet and
3 day to day operations.

4 So there's these three big pieces, but as
5 it happens, renewal in advanced reactors are the two
6 interactive pieces relative to the technical staff.
7 So the more standardization we get here, the more
8 industry is going to help itself on our responsiveness
9 in any other venue. So with that, thank you. I'm
10 going to turn it over. I would like to also like to
11 recognize P.T. introduced the NRC lecturers, but we
12 have some other members.

13 Dave Lochbaum is going to give a short
14 presentation. This is a Type 3 meeting, we invited
15 this. And later this afternoon, we have two
16 Government officials from the Indian Point area who
17 wanted to come in and make some statements, and they
18 are going to be here later this afternoon. They were
19 driving down. And I think it's important for all of
20 us to realize that this isn't an industry NRC issue.
21 The public is a piece of it and the NRC is the
22 public's representative.

23 And so I would say listen to what is being
24 said. David Lochbaum and I were on a panel one time
25 and David said to me, and I don't know if he'll

1 remember this quote, I was always very careful never
2 to agree with him. He said you always say you don't
3 disagree with me. Do you ever agree with me? I had
4 a chance to see his presentation. He was nice enough
5 to submit the view graph so we would have an idea.
6 It's right on. He's got a pretty reasonable message.

7 I think in terms of operating experience
8 and where the industry is on a plateau right now, if
9 you look at the operating curves, we're no longer
10 getting safers in industry. The curves, I'll say, has
11 flattened out and how we have to do something to
12 sustain that flat area. So I hate to say it, but in
13 this case, I'm not going to say I totally agree with
14 David, but in principle, his concept, I do agree with.
15 So, please, listen, because you'll kind of understand
16 even where the NRC is coming from on this sustaining
17 a certain level of safety that we have successfully
18 achieved through various programs. And this goes out
19 20 more years.

20 With that, anyone got any questions right
21 now just of me or P.T.? Because once you get into
22 Jerry and those guys, I'm going to get out of here,
23 because I need to let you guys get to work.

24 DR. KUO: Well, I also would like to
25 mention that today's meeting is being transcribed.

1 You can submit your comments either in writing or give
2 us your comments in this meeting and that will be
3 formally entering into the record.

4 MR. GILLESPIE: Anyone want to ask a
5 question? Any questions allowed. You know, anyone
6 knows I'll answer any question on any topic at any
7 meeting. No? Such shyness. Dave?

8 FACILITATOR CAMERON: You know, we need to
9 get on with this line.

10 MR. GILLESPIE: Okay. Go ahead.

11 FACILITATOR CAMERON: Okay. So, Dave?

12 MR. LOCHBAUM: What's the new DVT level?

13 MR. GILLESPIE: You know, I can't answer
14 that. Security and EP are not part of this
15 discussion. And that's a good point and I think Chip
16 is going to cover the scope of the meeting that we
17 need to keep this meeting on topic, which is going to
18 be important.

19 FACILITATOR CAMERON: Okay. Thank you,
20 P.T., and thank you, Frank. And I guess I don't want
21 to call it a seminole event, but we do have Frank
22 stating on the record that he agrees with David
23 Lochbaum on this and I won't put P.T. on the spot and
24 ask him the same thing. But thank you all for being
25 here and my name is Chip Cameron and I'm going to try

1 to provide some facilitation, assistance to all of you
2 to assist you in keeping the discussion organized and
3 relevant to make sure that everyone has an opportunity
4 to speak.

5 I'm going to try to keep track of some
6 major discussion areas not as minutes for the meeting,
7 but to help us work through the discussion on those
8 particular areas. And I just wanted to talk for a
9 minute about format and agenda and ground rules before
10 we get into the substance of the discussions today.
11 In terms of format, we're in more or less a town hall
12 setting, but we are going to have some speakers who
13 are going to be at the table throughout the day and
14 we're going to use those speakers as the laboring
15 horse, so to speak, for the discussion.

16 But we will be going out to all of you who
17 are out there, anybody who wants to ask a question, to
18 make a comment. And our first segment is going to be
19 a context segment. We're going to go to Mr. Jerry
20 Dozier from the NRC staff, not right at this minute,
21 but Jerry is going to give us an overview. Then we
22 have Mr. David Lochbaum from Union of Concerned
23 Scientists who is going to give us a perspective,
24 their perspective on license renewal and then we have
25 Mr. Fred Emerson from Nuclear Energy Institute who is

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1 here who is going to say a few overview words from the
2 NEI perspective.

3 And I'm going to ask them to just all be
4 at the table for that and when we go through those
5 three presentations, then we'll open it up for
6 discussion among people at the table and the audience.
7 After that overview, we're going to go to three
8 specific subject areas that P.T. has gone through for
9 you. And the first one is the Standard Review Plan
10 and we do have Kurt Cozens here who is going to, from
11 the NRC, tee that up for us. And I believe that Fred
12 Emerson and the NEI, I don't know if task force is the
13 right word, but you're going to have a couple of
14 people to give us some comments on that particular
15 issue.

16 Then, I believe, we go to GALL and we'll
17 have that teed up by Dr. Amy Hull and Jerry Dozier,
18 and again we'll have two people more from NEI. And
19 then we're going to go to standard format and content,
20 the Reg Guide and NEI 95-10, which is NEI's license
21 renewal documents. So we'll be following that format
22 and as Frank mentioned, we do have some broader
23 comments that we're going to hear at the end of the
24 day. We have two legislators from Local Government and
25 County Government in New York State who will be with

1 us.

2 We may have some other people who might
3 want to talk at that time. And in terms of ground
4 rules, if you want to make a comment, we need to get
5 everything on the record. We are taking a transcript
6 of the meeting and I think that will be our record and
7 your record basically of what happened here and that
8 will allow us to consider everything that is said here
9 as a public comment. So I would just ask that one
10 person at a time speak, so that we can not only give
11 our full attention to whoever has the mike at the
12 moment, but so we can get a clean transcript.

13 But I'll bring you this microphone. If
14 you're out in the audience, not at the table, we do
15 have a mike here that you can come up and speak to and
16 I would just ask that you give us your name, introduce
17 yourself to us, name and affiliation and we'll have
18 that on the record. I will try to follow discussion
19 threads or promote them as much as possible, rather
20 than sometimes the unrelated dialogues that we get
21 into, so if you do want to talk, just give me a signal
22 and I'll keep track of who wants to talk and we'll try
23 to be as informal as possible about this.

24 Frank made a point about providing the
25 underlying technical basis for positions that you

1 might have and that's always a good thing in any
2 discussion not underlying technical basis, but if you
3 do have a suggestion, if you disagree, please, give us
4 a rationale for why you are suggesting something. If
5 there is some assumptions that your recommendation is
6 based on, we may explore those assumptions to see if
7 those assumptions are correct.

8 But I'm just going to go around the well
9 here and ask people inside to introduce themselves and
10 then as we have people from the audience speaking,
11 we'll get their introductions at that time. And let
12 me start with Jerry. Jerry, if you could just tell us
13 who you are?

14 MR. DOZIER: My name is Jerry Dozier. I'm
15 the Coordinator for the Update Project and I work for
16 Dr. Kuo and his section. Ken Chang over there is my
17 section chief.

18 DR. KUO: Again, I'm P.T. Kuo, the Program
19 Director for the License Renewal and Environmental
20 Impacts Program.

21 MR. GILLESPIE: I'm Frank Gillespie.

22 MR. COZENS: I'm Kurt Cozens with the NRC.
23 I'm a Senior Materials Engineer. I'm also a team
24 leader for the reviews, some of the reviews and have
25 been an active member participating in the update of

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1 the GALL and the other associate documents.

2 FACILITATOR CAMERON: Thank you, Kurt.

3 MR. LINTZ: Mark Lintz, Program Manager
4 within License Renewal.

5 MR. CHANG: Ken Chang the Acting Section
6 Chief and also I'm auditing leader. I'm the user of
7 the GALL Update.

8 FACILITATOR CAMERON: Thank you, Ken.
9 David?

10 MR. LOCHBAUM: Dave Lochbaum, Nuclear
11 Safety Engineer for the Union of Concerned Scientists.

12 MR. WOOTTEN: David Wootten. I work for
13 Dominion Resources. I'm also representing the
14 Mechanical Working Group today as their comments on
15 review of the GALL.

16 MR. STEWART: Roger Stewart and I work for
17 Progress Energy and also representing the Mechanical
18 Working Group.

19 MR. POLASKI: Fred Polaski, Exelon
20 Nuclear. I'm Exelon's Manager for License Renewal.

21 MR. EMERSON: Fred Emerson with NEI. I am
22 the Program Manager/Project Manager for License
23 Renewal Issues at NEI.

24 MR. GHOSAL: Partha Ghosal, Southern
25 Nuclear representing Civil Structure Working Group.

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1 MR. MACFARLANE: Mike Macfarlane, Southern
2 Nuclear, License Renewal Project Manager.

3 FACILITATOR CAMERON: Okay. Thank you.
4 Thank you all. Let me just do an agenda check before
5 we get started. Any questions on the agenda, how it
6 is structured, whether certain topics are going to be
7 considered? Yes, and this is Dennis.

8 MR. ZANNONI: I'm Dennis Zannoni with the
9 State of New Jersey. Just a question about whether or
10 not handouts will be provided, especially for the
11 changes to the SRP and the GALL Report that are
12 scheduled for 10:00 and 11:00. The only handouts I
13 noticed was David's handout on the station over there.

14 FACILITATOR CAMERON: Jerry, you heard
15 Dennis' question?

16 MR. DOZIER: Yes, copies are being made of
17 some of the other presentations. The Bases Document,
18 we're hoping to have some copies of those. We are a
19 little behind on it. They are available
20 electronically on the website that I'll be talking
21 about as I go over my presentation. But we do have
22 all those available and we're trying to -- and I
23 apologize that we're a little behind on our copies.

24 FACILITATOR CAMERON: Okay. And one thing
25 I should note at this point that I'm going to put in

1 the parking lot, which means that when we get to an
2 appropriate time, we need to make sure we close this
3 out, and it is an issue that Dennis has raised, which
4 is to clearly identify differences between the current
5 bases and how the proposed documents would change. So
6 I'll just put that here and we'll make sure we pick
7 that up as we go through the discussion.

8 Anybody else, at this point, on process,
9 meeting process issues, agenda? Okay. Let's go first
10 to Jerry to give us the context on this and then we'll
11 ask him to stay up there and we'll have David come up
12 and then we'll have Fred Emerson come up, and then
13 we'll open it up for discussion. Jerry?

14 MR. DOZIER: Actually, as I said, I'm a
15 little behind on my copies and haven't got someone
16 here to assist, but I may have to do it from down
17 there. Hold on just a second.

18 FACILITATOR CAMERON: How we doing, Jerry?

19 MR. DOZIER: Not too good.

20 FACILITATOR CAMERON: Okay. Great.

21 MR. DOZIER: I apologize for that and also
22 as your question was, you had asked that if there is
23 not a handout here, if you'll give me your card or
24 something like that and there's something you need,
25 I'll be happy to send it off to you.

1 Next slide, please. Before today we've
2 kind of talked about the agenda. For this particular
3 part all I'm really doing is talking about the
4 background, the schedule and the scope. The
5 individual, Kurt Cozens will do SRP, Dr. Amy Hall, the
6 GALL Report and Mark Lintz will talk about the draft
7 Regulatory Guide.

8 Next slide. And these are the three
9 documents that we have out for public comment. Notice
10 that we call this, the last item, Draft Guide 1140.
11 Most of you will recognize that though as Reg Guide
12 1.188, that's the old version. We have to have a new
13 numbering system for this new revision and that new
14 number is Draft Guide 1140. But all that is is really
15 an update of Reg Guide 1.188. So that's really the
16 scope of the topic that we're doing today.

17 Next slide, please. If you tabulate the
18 number of pages that's involved in all these
19 documents, including the Bases Document, you'll come
20 up with about 1,800 pages. We'll also do a public
21 comment NUREG, so we'll be up to about 2,100. So I'm
22 not sure that when Frank Gillespie called it the
23 Encyclopedia Britannica he was far off. So we're
24 trying to get all of that in today. And I want to let
25 you know that for it, there's a lot of people to thank

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1 for it.

2 And actually, I can't mention everybody in
3 this one slide, but there was a lot of input that went
4 into this effort. We had the Office of Research was
5 involved and the NRR, we had all of the divisions were
6 involved, especially, I need to mention the Division
7 of Engineering, who did an outstanding job of
8 supporting it, contractors for the effort that's going
9 on now, the prime contractor was Parallax. They have
10 been responsible in putting together a lot of this.

11 And prior to that, there was Argonne
12 National Labs, who had looked at seven applications
13 and gathered the lessons learned, they provided the
14 comments that were considered for this update. Also,
15 a contracting firm called ISL had also looked at an
16 application to gather those lessons learned. So there
17 was a lot of comments from contractors, Government
18 labs that were considered in this update.

19 NEI, and you'll see all this on the
20 website that I'll show you the direction of in a few
21 minutes, made some specific recommendations for some
22 of the line items. They have been involved a lot in
23 all of the public meetings and have contributed to
24 this effort. We have also had public groups,
25 including the Union of Concerned Scientists, who has,

1 actually Dave, written a small book on license
2 renewal. And they have published those and they are
3 being considered in the input as well as some other
4 comments from the public.

5 And, of course, in this we want to get all
6 the stakeholders involved in this, so that we do have
7 a good document that is good for all the stakeholders.
8 In this, when we were going through the updates, we
9 had multidisciplinary teams, so that for example if we
10 were doing the electrical, we would have experts in
11 the electrical, from the electrical research,
12 electrical NRR, as well as the License Renewal Group.
13 We would kind of get together in these
14 multidisciplinary teams to go through the comments, to
15 address those comments and disposition those. And
16 then, of course, it went through the management
17 process, concurrence process, to update those. Next
18 slide. So thanks to a lot of folks.

19 We have also had several public comment
20 meetings. We did give a work in progress that we
21 published on our website on September 30th. From that
22 we got comments back from that, so that the January
23 issue that we just gave would be a better product.
24 Those comments that we got, a lot of them were from
25 NEI. They were considered, some incorporated, some

1 were not. But the input, we felt, contributed and the
2 questions of the line items helped to contribute to a
3 better product, we felt.

4 For this, everybody will say well, why did
5 you do the changes? He asked a good question, the guy
6 from New Jersey asked a good question. Well, what
7 really changed in these documents and how can we know
8 that? And we developed the Bases Document, so that we
9 could explain why we made the changes that we did and
10 what was our justification for those changes. Next
11 slide.

12 So where are we right now? Of course, the
13 documents went out for public comments on January
14 31st. We made the Bases Document available on the 7th
15 of February on the website, and the public comment
16 period will extend until March 30th. Next slide.

17 We're, of course, having the workshop
18 today. We'll have an ACRS meeting tomorrow, I mean,
19 Friday on the 4th. It will start around 8:00,
20 actually 8:30 and the ACRS, we'll have about an hour
21 and a half presentation for them on Friday.

22 This is tentative, but we do plan to have
23 another public meeting on April 21st for that. That
24 will give us time to have gotten the comments at that
25 point. We will be coming back at that public meeting

1 to possibly ask some more clarifying questions, you
2 know, so that we have a better understanding in a
3 public forum of the public comments. So that would be
4 the scope of this April 21st meeting.

5 In September we'll have ACRS meetings
6 again and we plan to publish the documents. That will
7 be the GALL, SRP. Well, it won't be a Draft Guide,
8 but a real Reg Guide during the September 31st time
9 period. About a month later, we would anticipate
10 having the Bases Document completed. Next slide.

11 This slide gives the website that the
12 information is on. What I try to do in this -- and of
13 course, right now agency-wide, if it ties back into
14 ADAMS it's kind of hard for the pointer to get back in
15 this. It has to do with security right now. But as
16 soon as that is resolved, this particular page, if you
17 want to know the whole story from beginning to end of
18 this update project, I tried to put all the meetings
19 summaries, the presentations, everything on this
20 website, so that everybody is aware of the changes
21 that have occurred. Next slide.

22 That's just a snapshot view of the
23 website. If you notice the -- I can't quite see the
24 date, but the top line there actually has the Bases
25 Document. If you click on that you will get a pdf

1 version of the Bases Document that has been updated.
2 Dave Lochbaum, the book that I'm referring to, I think
3 written by him under the Concerned Scientists also is
4 available on that website and we appreciate it. His
5 material is copyrighted, but we did get permission and
6 we thank Dave for permission to place that on our
7 website. Any questions?

8 FACILITATOR CAMERON: Yes. Since that's
9 process oriented, let's see if there's any questions
10 for Jerry on process, schedule, whatever before we go
11 to David and Fred Emerson.

12 MR. LOCHBAUM: Jerry, on your seventh
13 slide you said the Bases Document will be published
14 roughly a month after the rest of the documents. That
15 implies that the justifications will be created after
16 the fact, although I'm not sure that's what is
17 intended. Get the Bases Document to be issued with
18 the rest of the documents.

19 MR. DOZIER: You're right there and,
20 basically, that month is just to polish the Bases
21 Document. The bases, of course, as we make the
22 decisions will be we have to justify our changes, so
23 the Bases Document is being updated, you know,
24 basically the same time.

25 The real schedule that we were to was for

1 the official documents, and maybe that date may be a
2 little bit earlier. That's just to give us -- we want
3 to have the official documents, which all of the
4 official documents will be out by September 30th.
5 That's just to give a little bit of leeway slack to,
6 you know, do the finer publishing of the Bases
7 Document. Good question.

8 FACILITATOR CAMERON: Yes. Did you want
9 to add anything, Kurt? Right.

10 MR. COZENS: I think it has been said
11 before, but I think we ought to make certain that
12 everybody understands. The Bases Document is
13 available now. Is that correct, Jerry?

14 MR. DOZIER: Yes, for the --

15 MR. COZENS: It's in the draft form and
16 the only changes you're talking about, those changes
17 would result as a matter of public comment and those
18 will be discussed in the NUREG that documents how the
19 public comments were dispositioned. Is that correct?

20 MR. DOZIER: Yes.

21 MR. COZENS: And that will be available at
22 the time that the Reg Guide and SRP are issued?

23 MR. DOZIER: Yes.

24 FACILITATOR CAMERON: Okay. Thank you for
25 that clarification, Kurt Cozens. David, does that

1 answer your question? Anybody else on process issues,
2 schedule, anything like that? Again, this is Dennis
3 Zannoni.

4 MR. ZANNONI: Thank you, Chip. Just a
5 basic question. Maybe I missed it early, because I
6 came late. Why were all these revisions decided to
7 take place anyway? I mean, it's a large undertaking.
8 I just miss the point about why the revisions to all
9 the NUREGS, to the guides and all were even needed.
10 Maybe you can just touch on that to begin with and
11 provide some perspective, because when I go back and
12 try to explain 2,000 pages of changes, it's good to
13 start at the beginning.

14 FACILITATOR CAMERON: Great. Excuse me.
15 I'm going to go to Frank Gillespie. Frank, you
16 understand Dennis' --

17 MR. GILLESPIE: Yes, perfectly, Dennis.
18 And it's probably my fault we did it to some degree.
19 We're at about a midpoint in about a 12 year cycle for
20 renewal, and even from the beginning we knew when we
21 first published GALL that it was kind of our best shot
22 right at the beginning. And what we found ourselves
23 doing in retrospect, as Jerry said, is people looked
24 back at the lessons learned from the various
25 applications.

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1 The staff was remaking the same decisions
2 over and over and over again, and so the initial GALL
3 was probably too narrow in scope. And as we found
4 alternative paths of doing the same thing that staff
5 was approving, we felt it was important to now capture
6 those decisions, so that we wouldn't continue to make
7 them over and over and over again.

8 The other thing we looked back and saw
9 that was absent was this basis that Jerry is talking
10 about, so now we're starting to build in a knowledge
11 management sense a basis of why it says what it says
12 also. So this is a massive midpoint correction in a
13 program that has about a 12 year life and we're about
14 six years into it since Calvert Cliffs and we have got
15 about six years to go. So we do about six plants a
16 year on the average and six times six is 36, which
17 means we have run out of plants in the five or sixth
18 year coming in.

19 I do not expect after this big midpoint
20 correction that we will be making another one, because
21 if this document actually takes the standardization of
22 Chapter III in Aging Management Programs from about 40
23 percent of what we thought -- we actually were
24 shooting for 100 percent at the beginning and only hit
25 40 percent as Dominion demonstrated, I think at

1 Millstone, about 90 percent. For the next five or six
2 years we're really kind of on the margins.

3 So this is a big mid-course correction in
4 a big program and it's probably the mid-course
5 correction and it was time. We were finding ourselves
6 relooking at information over and over and remaking
7 similar decisions, and that wasn't either efficient or
8 effective.

9 FACILITATOR CAMERON: And, Dennis, I know
10 when you go back and talk to Joe and your other
11 colleagues and you explain why this is going on and
12 you just say it's Frank Gillespie's fault, I know that
13 they will understand that. Perfect. Any other
14 comments, questions on process issues? Okay.

15 Now, we're going to go to Mr. David
16 Lochbaum from the Union of Concerned Scientists for a
17 presentation and if David doesn't mind, after he's
18 done we'll ask Fred Emerson from NEI to come up, make
19 some comments, and then we'll open it up to discussion
20 generally. David, thank you.

21 MR. LOCHBAUM: Good morning. Wow. Things
22 really do look rosy from this side of the table.
23 Hopefully, it's just the cold weather that put color
24 in people's cheeks and not other reasons. Second
25 slide, please.

1 We only have two concerns or two
2 categories of concerns about the license renewal
3 process as manifested in the guidance documents. The
4 first concern is that the current process does an
5 inadequate job of evaluating what it does look at.
6 The other general concern is that the current process
7 is an incomplete job, because it doesn't look at
8 places it should look at. Other than those two
9 concerns, we don't have any problem at all. Slide 3.

10 What the current process looks at is,
11 basically, it looks at the plant owners Aging
12 Management Program for components and structures
13 important to safety and makes an evaluation of whether
14 that Aging Management Program is sufficient scope and
15 efficient effectiveness or adequate effectiveness.
16 Slide 4, please.

17 So essentially, the Aging Management
18 Programs are intended to monitor the condition of
19 components and structures important to safety for
20 signs of degradation, so as to cause repairs or
21 replacements to occur before the safety margins are
22 compromised. Slide 5, please.

23 If these Aging Management Programs were
24 effective, there would not be many aging-related
25 failures. After all, things are supposed to be

1 identified and fixed, safety margins maintained before
2 they are compromised. But the evidence is that there
3 is way too many aging-related failures occurring for
4 this to be true. Slide 6.

5 Since 2000 this is a list of failures on
6 pressurized water reactors. We also have a chart on
7 boiling water reactor failures, but it's the same
8 point just in a different context. You have got the
9 steam generator tube failure at Indian Point in 2000,
10 the hot leg leak at Summer in October of 2000, the
11 debris from the water storage tank at Callaway fouling
12 the AFW pumps.

13 You have got the CRDM nozzle leak at
14 Oconee and other plants. You have got that problem
15 leading to reactor head damage at Davis-Besse, and you
16 have got an electrical breaker failure leading to a
17 very significant long outage at San Onofre.

18 What these events show or if you look at
19 these events a little bit closer on Slide 7 is that
20 they are caused by two different things. One was
21 looking in the right places for degradation, but using
22 the wrong methods and there are several examples of
23 that. Indian Point's steam generator tube failure had
24 been looked at in 1997. The degradation that was
25 there was missed by the inspection technology.

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1 At Summer, the hot leg weld that leaked in
2 2000 had been looked at in 1993. The damage, which
3 was thought to occur from original construction was
4 missed during that and previous inspections. At
5 Callaway, the tank lining had been inspected, I forget
6 right now how recently before the failure, but no
7 signs of degradation were found even though they were
8 evident or they were present.

9 Just last year the Pilgrim licensee
10 submitted a Licensee Event Report on a reactor coolant
11 pressure boundary leak or weld that leaked. That weld
12 had been inspected in 1999 and no signs of degradation
13 were found even though the root cause traced it back
14 to a 1977 weld repair. So either the methods being
15 used are bad or crack propagation is much, much faster
16 than people thought. Slide 8.

17 The other problem is that people are
18 looking in the wrong places with the right methods and
19 if you're looking in the wrong places, you can't find
20 cracks or degradation. Examples of that are Oconee
21 for the CRDM nozzle leakage. They were looking at the
22 j-groove welds and the CRDM nozzle leaked somewhere
23 else.

24 Davis-Besse, they were not following
25 Generic Letter 8812 or 8810 or whatever it was on

1 boric acid corrosion control and it led to some
2 significant damage there. San Onofre, the electrical
3 breaker that failed and caused this long outage was
4 scheduled for inspection during that outage, but was
5 deferred to the next outage. You know, you can't fix
6 something you don't look at. Slide 9.

7 Basically, Aging Management Programs can
8 only be effective by looking in the right places with
9 the right methods. It takes two rights to make a
10 right in this case. There are way too many aging-
11 related failures to claim that Aging Management
12 Programs are as effective as they need to be to
13 guarantee safety margins into the next 20 years.
14 There are no points for trying. Slide 10.

15 What the NRC should also look at in Aging
16 Management is the need for their use of diverse
17 inspection methods, not necessarily for all components
18 within the scope, but definitely for those components
19 and structures that have high risk value. This is
20 allegedly a risk-informed regulator. That application
21 to this problem would say that certain components in
22 the GALL, SRP and elsewhere need to be looked at by
23 more than one method, because the existing methods are
24 not as reliable as they need to be. That's not
25 happening.

1 In addition, the Aging Management Programs
2 need to include some small set of out-of-scope
3 sampling hopefully to verify that the boundaries have
4 been drawn in the right places and if not, early
5 identify the fact that the boundaries have not been
6 drawn right and allow those to be fixed before things
7 fail instead of afterwards. Slide 11.

8 The next section is the other concern that
9 we have, is that the scope is not broad enough. It
10 doesn't look at what should be looked at. The
11 programs basically look at the equipment, the physical
12 condition of the plant, the aging management of the
13 plant, but there is also the aging of the regulations
14 themselves.

15 There are 103 plants operating in the
16 United States today. None of them have the same
17 licensing basis. It's a hodgepodge of regulations
18 from the '60s, '70s, '80s, '90s with exemptions,
19 waivers and a whole kind of mishmash of compliance
20 with regulations over 40 years. Again, no two are
21 alike.

22 The license renewal process makes no
23 effort whatsoever to ensure that that mismatch or that
24 hodgepodge provides a comparable level of protection
25 to a plant licensed today under today's safety

1 regulations, which would be an option to license
2 renewal of an old plant. But the NRC doesn't look at
3 that. The applicant doesn't look at it and the NRC
4 doesn't verify it. Slide 12.

5 As I said, an option to renewing a license
6 of an aging nuclear power plant would be to build a
7 brand new plant. It may not be an attractive option
8 or a particularly economical option, but it is an
9 option.

10 If that were the case, if that option were
11 pursued, there is no doubt whatsoever that that new
12 plant would have to meet today's safety regulations,
13 not the regulations from the '60s or the waiver from
14 the regulations from the '60s, but today's
15 regulations. But there is no showing whatsoever to
16 ensure that the renewed regulations at the old plant
17 provide anywhere close to the same protection of the
18 public as today's regulations. Slide 13.

19 The concept, the assumption, the operating
20 assumption is that since all of those were done with
21 reviews and scrutiny and insurance that the public was
22 protected that that's good enough. Well, that same
23 analogy, that same process, applies to the equipment,
24 but the industry and the NRC aren't accepting that
25 premise on the equipment side, so they shouldn't

1 accept it on the regulation side either.

2 The exemptions and waivers were granted
3 individually and the basis for the individual
4 exemptions and waivers may have been perfectly
5 justified, but collectively they may not provide the
6 same protection. The analogy I use is a bee sting.
7 Unfortunately, by test I have shown that I can survive
8 a bee sting. 300 bee stings in a day might be a
9 different answer. I'm not going to test that one, at
10 least not voluntarily. Slide 14.

11 One other thing that the NRC doesn't look
12 at, and we can't understand this one at all, is the
13 Severe Accident Mitigating Actions. Allegedly, this
14 is an attempt to see if there is some way to make a
15 plant safer against severe accidents.

16 If you look at how the NRC has resolved a
17 lot of generic issues, it has been by changing the
18 guidance documents or its regulations, so that any
19 future reactor would have to incorporate some new
20 feature, some lesson that was learned from experience.
21 The NRC didn't necessarily make these things
22 grandfathered or applied to the existing plants, but
23 any new plant built would have to meet that new
24 requirement or that changed requirement.

25 The example we use in this presentation is

1 how the NRC resolved USI, Unresolved Safety Issue, A-
2 43, a revised Reg Guide 1.82 to require all new plants
3 to do a calculation of the containment sump blockage
4 differently than all the plants that are operating
5 today.

6 Yet, as the NRC relicensed Calvert Cliffs
7 and Oconee and ANO and all the other pressurized water
8 reactors, the NRC did not require these old plants to
9 go back and relook at the containment sump blockage
10 calculation to see if it was as good or equivalent to
11 what a new reactor would have to do and there's many
12 other examples of this same category.

13 Again, if the NRC thought this was the
14 right thing to do from a cost benefit standpoint for
15 new reactors, under SAMAs space it looks like it at
16 least should be screened and it's not necessarily a
17 guarantee that they all would have to be done, but by
18 not even looking at it you're not even finding those
19 opportunities. Slide 15.

20 What we think the license renewal process
21 should do and what the various guidance documents
22 should be revised to include is a process that
23 verifies that the aging regulations applicable to any
24 reactor provide equivalent protection to the public as
25 provided by today's regulations. And secondly, that

1 the Aging Management Programs are not just in place,
2 but they are also effective. Slide 16.

3 If, and this is a big if, this is as big
4 an if as our system allowed, if done properly, license
5 renewal would expose people living near an aging plant
6 under the 20 year period of its extension to no
7 greater risk than that from a brand new reactor built
8 on that same site. I don't think that that check has
9 been made. I don't think that verification is being
10 done by the current license renewal process.

11 It's not the first time I have said this
12 and I have heard various people refute, rebut,
13 downplay, disagree or whatever these comments in the
14 past. And what's frequently used is the industry's
15 performance as a way to show that this can't be true.

16 Slide 17 shows, for example, the
17 significant events from I believe it's last year's RIC
18 package. Significant events at nuclear power plants
19 are decreasing. If you look at Slide 18, essentially,
20 the industry has drawn the left portion of the bathtub
21 curve. So congratulations for showing what nature
22 does. It's very commendable.

23 The bathtub curve, as you know, is
24 basically a plot of risk versus age and the left side
25 portion is the Infant Mortality Phase or the Break-In

1 Phase and the right hand part of the curve is the
2 Wear-Out Zone. So the significant events and all
3 those other neat things are, essentially, just what
4 nature would do coming down the left hand side of the
5 bathtub curve. Great.

6 Slide 19 shows that some plants didn't get
7 out of that zone. Fermi-1, TMI-2, St.-Laurent,
8 Brown's Ferry Nuclear Plant, Units 1 and 2, the Sodium
9 Reactor Experiment, Chernobyl and SL-1 all didn't make
10 it out of the Infant Mortality Phase. They had
11 accidents. We haven't had any on the right hand part
12 of the curve yet, but there seems to be some space
13 available there. So unless we fix some of these
14 problems, we'll start adding names on that part of the
15 curve.

16 Why all this matters, why all these
17 concerns caused us to write the report that Jerry
18 mentioned last year was that all the nuclear power
19 plants operating in the United States today are
20 heading towards, if not already in, Region C, which is
21 the Wear-Out Zone of the curve. But if NRC fails to
22 remedy the shortfalls in its license renewal process,
23 we'll start adding the names of the plants to that
24 Wear-Out Zone as we have done on the Break-In Zone.

25 Slide 21 suggests, it doesn't prove, that

1 we may already be seeing Region C. This is the
2 Precursor Occurrence Rate again from, I believe, last
3 year's reg. There has been a turn around over the
4 last three years where the number of precursors or the
5 precursor rate is increasing instead of decreasing
6 over the last few years. If you look at the plot
7 altogether, it resembles the bathtub curve, which
8 shouldn't be a shock, it's just nature at work.

9 Interesting enough before this last few
10 years when the chart was heading down, the NRC used to
11 draw trend lines on it. Now that it has turned
12 around, the trend lines disappeared and the data is
13 just provided now. There is no trends concluded from
14 this data by the NRC now. With that, those are our
15 concerns. We will be probably providing some written
16 comments very similar to this effect by the end of the
17 month for the process. Thank you.

18 FACILITATOR CAMERON: Okay. Thank you,
19 David. And why don't you just stay up here and I'm
20 going to ask Fred Emerson to come up here and talk to
21 us and then we'll go on to you for discussion. David
22 has raised some important issues, right places, wrong
23 methods, wrong places, right methods for us to keep in
24 mind as we go through the discussion of these
25 documents whether you agree with David or not, I think

1 that you need to consider how his comments play out in
2 revising these documents.

3 He also raised some, what I would call,
4 over-arching issues about the mishmash of the
5 regulatory structure for individual plants and the
6 comparative regulatory structure for existing plants
7 and new plants for you to keep in mind. And with
8 that, let me go to Fred Emerson and then we'll open it
9 up for questions and discussion.

10 MR. EMERSON: I would like to thank the
11 staff for inviting us to participate in this meeting.
12 As you will see later, quite a few industry folks have
13 spent a good bit of time working on the information
14 that was provided first in last September and then in
15 January to try to improve this process. But just to
16 step back a little bit, the license renewal process,
17 as Frank said, was instituted several years ago. It
18 involves a rigorous preparation process by licensees
19 to review Aging Management Programs at the plants.

20 It involves an equally rigorous review
21 process by NRC to assure that these programs are
22 adequately carried over into the period of the renewed
23 license to help assure that the health and safety of
24 the public is maintained during the renewal period.
25 There has been a process that has grown up over the

1 last several years to assure that to maintain the
2 rigor of this process, to assure that there is a
3 healthy relationship between the regulator and the
4 regulated industry and making sure that the necessary
5 steps are taken to assure that these programs are
6 working, not only in the 40 year initial period, but
7 in the 20 year period beyond that point.

8 This process builds on programs that have
9 been developed, some more recently than others, to
10 help assure that Aging Management is adequately
11 managed during the current licensing basis and during
12 the period of renewed licenses. There have been a
13 number of materials issues which have surfaced. Dave
14 touched on some of those that have resulted in an
15 increased level of attention to Aging Management
16 Programs and materials programs and these have been
17 effected recently to help address some of the
18 materials issues that we're seeing.

19 But in summary, the process has been
20 developed. It builds on existing programs and it is
21 working. Now, a rigorous process can be improved.
22 The original GALL that was issued several years ago,
23 Frank touched on the match rate between being 40
24 percent initially, being more like 90 percent. A
25 rigorous process can be improved and that's what the

1 purpose of this GALL Update is. Both the regulator
2 and the regulated industry and the public at large
3 benefit from this.

4 One of the other things that the staff has
5 undertaken to improve the efficiency of this process
6 is greater attention to initial site reviews to
7 address issues, get questions answered at an earlier
8 stage in the process so that a more thorough review
9 can be done at the front end with less paperwork
10 involved and answering the questions that need to be
11 answered.

12 We appreciate the opportunity to
13 participate in this, because, as I said, the industry
14 certainly benefits from a more efficient process
15 without reducing in any degree the level of rigor
16 involved. The comments that we are going to provide
17 on this process today we're going to provide rather
18 than a long laundry list of detailed comments, we're
19 going to provide a list of the comments that we think
20 go to the issues that need to be addressed first.
21 These are going to be in the mechanical, the civil
22 structural and the electrical areas, as has been laid
23 out in the agenda.

24 In the mechanical area, you'll hear from
25 Dave Wootten from Dominion, Roger Stewart from

1 Progress energy, whom have introduced themselves, from
2 the civil structural area, from Partha Ghosal and Mike
3 Macfarlane from Southern Company, in electrical area,
4 Steve Schellin from NMC and Fred Polaski from the
5 Exelon Company, and they will give you a high level
6 view of these initial set of comments. And during
7 these presentations, we'll be happy to engage in
8 dialogue and answer questions, clarify industry
9 concerns, etcetera, that we think will help the whole
10 process become better.

11 At the end of the comment period, at the
12 end of March, we'll provide more detailed comments
13 which are going to be provided in a manner that will
14 help the staff address the issues that we think need
15 to be addressed to improve the process. If we need to
16 engage in additional meetings to clarify the industry
17 viewpoints on these issues, we'll be happy to do that.
18 But overall our goal is to make the process work
19 better.

20 The end result should be a set of guidance
21 documents that provide a more consistent and less
22 subjective review. Dave touched on the difference in
23 licensing bases throughout the industry, and that is
24 true, there are. A better set of guidance documents
25 can result in a review that has the right focus on

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1 safety. It asks the right questions. It takes credit
2 for programs where they have already been established
3 and are being observed by the licensees doing the
4 applications.

5 And this is what I mean by a more
6 efficient process. So this is going to be a benefit
7 to everyone and we've put, I won't speak for myself,
8 but I'll speak for my industry colleagues, who have
9 spent several weeks doing very little else but working
10 on this guidance document to try to make it a better
11 one, and you'll hear from the results of those
12 discussions later. Thank you.

13 FACILITATOR CAMERON: Okay. Thank you
14 very much, Fred. Before we go to questions, comments
15 from the audience, David or Fred, do you have anything
16 further to say, at this point? Anybody in the
17 audience have a question for either Fred or David?
18 Yes, sir, and, please, identify or introduce yourself.

19 MR. BOWMAN: I'm Marvin Bowman. On Slide
20 10, Dave, I'm curious, the second bullet talking about
21 the Aging Management Programs must include some out-
22 of-scope sampling to minimize looking in the wrong
23 place. What do you mean by out-of-scope? Out-of-
24 scope of what?

25 MR. LOCHBAUM: For example, piping

1 inspections have been revised in recent years to risk
2 inform, to look at areas where experience shows the
3 inspections are showing degradation, not to look
4 elsewhere where inspections have shown degradation
5 doesn't occur.

6 MR. BOWMAN: Like accelerated corrosion?

7 MR. LOCHBAUM: That is an example. There
8 is also some weld --

9 MR. BOWMAN: I think you are wrong there.

10 MR. LOCHBAUM: You think I'm wrong there?

11 MR. BOWMAN: Yes. I think what you're
12 finding is another case where operating experience
13 continues to build. People are learning that they
14 should have looked some places, but they didn't.

15 MR. LOCHBAUM: Isn't that the same thing?

16 MR. BOWMAN: But the basis for the aging
17 mechanism is always there. It was always understood.

18 MR. LOCHBAUM: Oh, that's true, I mean.

19 MR. BOWMAN: The issues aren't so much the
20 program itself.

21 FACILITATOR CAMERON: Okay. Let's save
22 it. Well, let's let him answer that.

23 MR. LOCHBAUM: Well, I think, we're saying
24 the same thing. If the experience is showing that the
25 programs need to look at areas differently or need to

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1 look at additional areas. It's the same thing I'm
2 saying. You look at other areas to confirm that you--
3 you don't look at every inch of every pipe of every
4 part of the plant. You make smart decisions on what
5 you look at. That selection process, hopefully, is
6 correct.

7 What we're finding, not what we're
8 finding, what is manifesting itself is failures of
9 equipment that is not being inspected. So it's things
10 that are outside the inspection scope. Some out of
11 the scope are things that currently aren't within
12 inspection and testing programs need to be
13 periodically checked to verify that you have drawn the
14 boundaries in the right areas, whether it is flow
15 accelerated corrosion or heat damage cables, whatever
16 the mechanism is some verification that you have drawn
17 the boundaries in the right place would be prudent.

18 FACILITATOR CAMERON: Do you have anything
19 further?

20 MR. BOWMAN: Yes. As far as the flow
21 accelerated corrosion issue goes, are there specific
22 safety system examples you can cite? I know of a
23 number of non-safety-related systems and some minor
24 failures, but there have not been any recent, to my
25 knowledge, significant failures.

1 MR. LOCHBAUM: I have no examples to point
2 that.

3 FACILITATOR CAMERON: Do you have a second
4 question?

5 MR. BOWMAN: On Slide 13, the second
6 bullet, you say "But exemptions and waivers were
7 granted individually." The implication is that those
8 exemptions and waivers resulted in age-related
9 failures that should not have occurred. Can you cite
10 operating experience of examples to support your
11 contention there?

12 MR. LOCHBAUM: Well, I may have mislead
13 you. This went into the second part of our concern
14 was that the license renewal process doesn't look at
15 the aging of the regulations themselves. It wasn't
16 just aging-related regulations that we're talking
17 about. There are others as well. It's exemptions to
18 all kinds of things. I don't have any examples of
19 aging-related or non-aging-related. But the comment
20 wasn't specifically to aging-related failures.

21 FACILITATOR CAMERON: Okay. Jerry, do you
22 want to add something? Jerry Dozier.

23 MR. DOZIER: It's more of a question
24 today. Maybe you're talking about like the periodic
25 safety reviews that other countries use when they have

1 these 10 year -- they basically instead of -- they
2 will have a 10 year review and based on that review,
3 they will look at all of the current regulations and
4 see if there is a delta between the old regulation
5 versus the new regulation. And if there is those
6 differences, then they justify those reasons. And
7 maybe is that really where you were going with that?

8 MR. LOCHBAUM: Exactly. That's much
9 closer model to what we were proposing. Hopefully,
10 that answer would be no, that the deltas between
11 exemptions waivers and the old regulations and today's
12 standards are different, but they provide equivalent
13 protection. Hopefully, that would be the answer. But
14 unless you do that review, you don't come to that
15 verification step. So that is a model of what we're
16 trying to pose here. Not necessarily that frequency.
17 I'm not suggesting that, but that concept.

18 FACILITATOR CAMERON: Okay. Now, some of
19 that may be a good example. Some of David's comments
20 are extremely important, but may raise larger issues
21 than the documents we're talking about here. But I
22 guess I just wanted to check in with the NRC and
23 others in terms of David's points about we're looking
24 at the right places, but using the wrong methods or
25 we're not looking at the right places, we're looking

1 at the wrong places.

2 Are those two points, are they covered in
3 intended to be covered in the documents that we're
4 talking about? In other words, without getting into
5 any arguments or debates about the examples, whether
6 the examples are right or wrong, are David's broad
7 points there something that should be covered
8 inherently in the documents that we're going to be
9 discussing?

10 MR. DOZIER: On the right -- I'm looking
11 for a research representative, because I know that --
12 could you tell them about the project that research
13 currently has on the effectiveness? It's an in
14 progress thing. It's not a completed, but there is a
15 project in research that, I think, may be of interest.

16 MR. VORA: My name is Jit Vora. I'm with
17 the Office of Research. To give you a little bit of
18 background on it, from 1982 to 1994, we had initiated
19 a comprehensive Nuclear Plant Aging Research Program
20 and we looked into the component systems and
21 structures in very detail to understand and manage
22 aging in safety-related component systems and
23 structures. NPAR Program actually produced 150
24 technical reports, studied 30 components, 20 systems
25 and 20 special topics and we actually provided the

1 basis for the initial license renewal rule making.

2 Since then, in that program we have
3 identified all the different locations where the
4 possibility of age-related degradation, and to
5 understand the aging mechanism, we talked about
6 material stressors environment and interactions over
7 time. And then we looked into the applicable cause,
8 regulations, requirements, important standards, what
9 are the inspections, surveillance, monitoring and
10 technical specifications, etcetera. And we had to
11 provide those reports which had to involve the initial
12 basis for the GALL Report.

13 Now, since then, now we have an active
14 program what we call the "Proactive Material
15 Degradation Program," and there we are looking into
16 the primary system pressure boundary components and
17 structures. And to actually go systematically to
18 understand and manage aging on all the critical
19 component systems and structures. So when we select
20 the component or the structures, we identify the
21 boundary, we identify all the material stressors
22 environment and we ask a very simple question. What
23 happens with time?

24 So that's actually an ongoing program to
25 ask the question what happens with time? What other

1 aging mechanisms where they are operating and what are
2 the ways to mitigate those effects? So that program
3 is continuing and we are learning from our operating
4 experience and from all the license renewal feedback
5 into our research program and we are progressing
6 further.

7 FACILITATOR CAMERON: Okay. Thank you
8 very much.

9 MR. LOCHBAUM: I take it from that that
10 the NPR wasn't fully successful, otherwise this
11 current program wouldn't be necessary. Is that what
12 I can take away from that?

13 FACILITATOR CAMERON: I'm not sure that
14 that's not a rhetorical question or is it?

15 MR. LOCHBAUM: Apparently.

16 FACILITATOR CAMERON: I guess it is. I
17 guess it is.

18 MR. LOCHBAUM: 15, 15.

19 FACILITATOR CAMERON: Okay. We may get to
20 a rhetorical answer for you on that, but, P.T.?

21 DR. KUO: Maybe I just give a little
22 background on how the GALL Report came about. Back in
23 1994 when, as Jit just mentioned, they finished their
24 empire report, there were about 150, more than 150
25 reports, individual reports. So we took on that

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1 effort to basically analyze all these reports and put
2 in this GALL format that you see today.

3 From all the information contained in
4 those reports, plus we reviewed all the License Event
5 Reports up to a point, and then we also included many
6 of the informations from the industry's report, then
7 it was NUMARC. NUMARC submitted the 10 topic reports
8 to us. We reviewed. We had matched with the industry
9 so many times almost like every couple of weeks we've
10 met. So we have documented all the meeting results.
11 So the GALL actually is a result of reviewing all the
12 -- more than 150 reports and resulting from them, plus
13 the License Event Report relating to aging up to 1998.

14 And then also the information from the 10
15 NUMARC Industry Report. So all these information were
16 included in this final GALL you see today. So that is
17 a lot of information. And also, let me comment on the
18 periodic safety review. We have ongoing in the
19 international community talking about exactly same
20 topic. The reason that the periodic safety review was
21 there or originally was because some of the foreign
22 plants don't have this what we call here in the United
23 States "current licensing basis." They do not know
24 what that was designed for.

25 So they've started this periodic safety

1 review to reestablish their current licensing basis.
2 And the discussion is ongoing right now for those
3 countries that I want to also extend their current
4 life, we actually made, we agreed it's not final yet,
5 but we agreed in the discussion that periodic safety
6 review is the prerequisite for those plants that are
7 without a current licensing basis.

8 But in the United States, we do have the
9 current licensing basis. Although, like you said,
10 Dave, it's hodgepodge here. Yes, there are a lot of
11 differences between -- among the plants. However,
12 what makes up the difference is that we do have a
13 regulatory process that the others don't have. And by
14 that, I mean, we issue generic letters. We issue
15 bulletins. We issue orders. And also on top of that,
16 we have an On-Site Inspection Program that actually
17 follows the operation on a daily basis.

18 The plants in other countries don't have
19 and although the current licensing basis among the
20 plants may be different, but if there is any
21 deficiencies in the current licensing basis, that will
22 be corrected on a continuous basis by what is called
23 the "regulatory process" we have.

24 MR. LOCHBAUM: If Davis-Besse was in one
25 of those foreign countries instead of Ohio, I would

1 have felt better about all of that. We have all of
2 that, yet we still have these huge failures where
3 plants aren't following their design basis. The NRC
4 is not finding plants outside their design basis.
5 There have been 26 reactors shutdown for at least a
6 year since 1984, because they were so far outside the
7 licensing basis it wasn't funny. So that all sounds
8 good, but in practice it's not working real well. And
9 that's what we're trying to do so that we don't have
10 these huge surprises on a recurring basis.

11 FACILITATOR CAMERON: Frank Gillespie?

12 MR. GILLESPIE: Let me see if I can kind
13 of -- I'm going to try to wrap-up where Dave and I may
14 agree and where we disagree. Where we agree is, I
15 think, the nature of the bathtub curve is evident in
16 every industry. I think where we disagree is our
17 feeling on sustainability of being on that flat
18 portion, which the Commission and the regulators and
19 the industry has performed to an acceptable level of
20 safety.

21 You raised several issues which are, you
22 know, bureaucratically, I could say, are beyond GALL,
23 because GALL is what is different at the 40th year.

24 MR. LOCHBAUM: I'll agree with you they
25 are beyond GALL.

1 MR. GILLESPIE: And so you raised a good
2 point. And the challenge, I think, that the industry
3 and the regulator has is to sustain the performance we
4 have now achieved. And you are challenged in saying
5 that operating experience is coming along and we're
6 learning from that operating experience, but the
7 answer to the gentleman's question back here was we
8 feel that we do have the safety and the critical
9 components are actually being -- we might say we have
10 learned, we believe we have learned.

11 I mentioned earlier that GALL is going to
12 end up likely being a living document, because it's
13 more of a database. It's actually providing a
14 repository now where you put the operating experience
15 into and I will admit that GALL is focused on license
16 renewal right now, but in the long-term, I think, all
17 of us are going to have to have a repository, so that
18 when something happens, and I think the industry can
19 relate to this, we don't run back and find a 1982
20 information notice and say oh, see, we knew it in
21 1982.

22 And so this is the start, I think, of
23 systematically providing a structure to incorporate
24 that operating experience in and actually get more
25 systematic about it. But I think, I believe, we are

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1 on the bottom of that bathtub curve, but if I didn't
2 believe we could sustain it for 60 years, I wouldn't
3 be here. And so I think the process we're on will
4 allow us to take these events that you've mentioned
5 and other events will occur in the future, incorporate
6 them into the structure and yet still sustain that
7 flat level.

8 The challenge you gave us, David, and I
9 think it's a challenge we all need to take up, is when
10 you look at the increase in the precursors for three
11 years, we have to be very cautious, and that's what I
12 mean. There is indicators. We're being measured and
13 it's very visible to sustain that position on that
14 bathtub curve. I believe we can do it. I think
15 generally the Commission, you know, by having this
16 program has said it can be done. The industry has to
17 step up and demonstrate it can be done and lean by
18 operating experience.

19 And there will always be operating
20 experience. That's a beyond license renewal question
21 though. But I don't want to hide behind saying
22 license renewals the exception at the 40th year,
23 because you've asked a broader question. How can we
24 learn and continue to learn and will we continue to
25 learn from operating experience? I believe the answer

1 is yes. In fact, it takes antagonists on the other
2 side like you to keep us honest.

3 So I do appreciate you bringing it up and
4 I hope you keep bringing it up, because we have to
5 stay on the flat part of that curve. Thank you.

6 FACILITATOR CAMERON: Thank you, Frank and
7 P.T., for that context. Ken, and introduce yourself,
8 please.

9 MR. CHANG: My name is Ken Chang and I
10 would like to say a few words from the position that
11 I'm Audit Team leader. The area I would like to
12 address is what Dave says there are possibilities of
13 you looking at the right places with the wrong method.
14 The current practice, what I mean is, the audit
15 process that we implemented about a year and a half
16 ago is really starting from the objective of verifying
17 that what applicant claims as consistent with GALL is
18 consistent with GALL. But has been expanded into the
19 right direction to address Dave's concern about right
20 places with the wrong method.

21 Bring the Audit Team to the plant site to
22 talk with the plant staff, operating people,
23 engineering people, maintenance people. We are not
24 looking at one place with one method. We are looking
25 at what other alternatives existed in the plant, that

1 people may not know they have that capability there?
2 Say are you doing that? Do you get benefit from that?
3 And also, even now we find two methods could be
4 applicable, could be applied to address that aging
5 mechanism for that component, we bring another
6 dimension into it.

7 How are you sure that Aging Management
8 Program is working to address that aging effect? It
9 comes to be called effectiveness verification. If
10 people recall in the pilot plants, we keep on
11 emphasizing what is the One-Time Inspection Program?
12 What do you use for it? The One-Time Inspection
13 Program in addition to the Aging Management Program
14 credit for management of certain aging effects, you
15 are verifying that it is really working. That is to
16 verify a solid program or force program to verify the
17 effectiveness of Aging Management Program.

18 The purpose of that is trying to avoid
19 looking at the right place with the wrong methods.
20 And if we are using what you believe to be the right
21 place and right methods, you will say that right
22 method is effective. No, we are getting there, we are
23 on the way to address our issues. But I certainly
24 cannot say it's 100 percent covered. But we have that
25 in our mind all along.

1 FACILITATOR CAMERON: Thank you very much,
2 Ken. Other comments? This is Dennis, Dennis Zannoni.

3 MR. ZANNONI: Thank you, Chip. Just a
4 quick question, Fred. You mentioned that the NEI
5 staff were going to give a presentation outlining
6 their comments, but it's not on the agenda, so I'm
7 just wondering what time this will be?

8 MR. EMERSON: Well, actually, it is on the
9 agenda. It's listed under the NRC portion of the
10 agenda where it talks about mechanical, civil
11 structural, electrical. During that portion of the
12 agenda was when we will be providing our comments.

13 FACILITATOR CAMERON: And just to make
14 that clear, and thank you for asking that question,
15 Dennis, when we go to the three substantive discussion
16 areas, we're going to start off with an NRC
17 presentation and then we're going to have two people
18 who are the experts in that particular area, I take
19 it, from NEI coming up.

20 MR. EMERSON: Two of the many experts on
21 those.

22 FACILITATOR CAMERON: Two of the many,
23 many experts coming up. So that's where those
24 comments will be and discussion will take place.
25 Anybody else, at this point? Okay. I would thank

1 David and Fred for a good perspective to start the
2 discussions today. Rather, we're a little bit ahead
3 of time, which is unusual for us, but rather than
4 going to the first discussion area right now, let's
5 take a short break and then we'll come back with Kurt
6 Cozens. Why don't we take until 9:50? That gives you
7 about 18 minutes, by my watch, okay?

8 MR. DOZIER: And can we work on getting
9 copies of presentations?

10 FACILITATOR CAMERON: Yes, do we have the
11 additional copies of Jerry's presentation? And there
12 is a sign-in sheet. If everybody can make sure that
13 you sign-in on one of the sign-in sheets? Okay.
14 Kathy, thanks.

15 (Whereupon, at 9:27 a.m. a recess until
16 9:48 a.m.)

17 FACILITATOR CAMERON: If we could have
18 everybody get comfortable, take their seats, we'll get
19 started with the next segment. Okay. We're at
20 changes to the SRP-LR and we have Mr. Kurt Cozens from
21 the NRC staff here to talk about that and then we'll
22 go on to you for questions, commentary after he is
23 done. Kurt?

24 MR. COZENS: Welcome back. It looks like
25 we've got a -- can I be heard? I'm getting no. Am I

1 being heard? Okay. I'm not hearing myself which is
2 unusual. It must be very good acoustics in this room.
3 I'm going to diverge a shade from my prepared remarks
4 and talk about these documents a little bit just to
5 position how they are used and what their
6 relationships are to one another.

7 It appears that there may be some
8 individuals attending our meeting today that may not
9 have a full appreciation and then I'll proceed to talk
10 about, and that's in regard to this parking lot issue,
11 identify and describe the differences between the
12 current and proposed documents. So that's our
13 position where the Standard Review Plan fits and that
14 relationship to the GALL Document.

15 But let me give you a little background on
16 where I fit in this process. I am a Senior Materials
17 Engineer in the Office of Nuclear Reactor Regulation
18 and also I work in the Division of Regulatory
19 Improvement Programs and License Renewal under the
20 RLEP Group, RLEP-B Section, which is the group which
21 actually performs the audits and reviews which would
22 do the site visits to look at the safety review.

23 I have also participated in the
24 development of the model and how we do our work. This
25 is a revision that started about a year and a half

1 ago. I've led the Point Beach audits and reviews and
2 am an active member on the GALL Update. I also was
3 one of the primary authors to the revisions to the
4 Standard Review Plan.

5 Having kind of positioned myself where I
6 work in all these different areas in this activity,
7 our primary basis for existing is Part 54 of the 10
8 CFR document, the License Renewal Rule. The Standard
9 Review Plan, which is this document, is the primary
10 implementing document performing reviews for
11 applicants that are submitting an application for
12 renewed license under Part 54. It is the top level
13 review document we have.

14 The GALL document, the Generic Aging
15 Lessons Learned Report is a subservient document to
16 the Standard Review Plan. It basically feeds into the
17 Standard Review Plan as the technical underpinnings of
18 things that we have decided are technically
19 acceptable. It represents one acceptable way of
20 addressing the regulations. Essentially, the GALL
21 document itself is a series of Aging Management
22 Reviews, say 2,000 odd line items that are in there,
23 each one representing an Aging Management Review that
24 are generically accepted by the staff.

25 And under the guise of the Standard Review

1 Plan do not require a subsequent review of the
2 material that has already been covered in the GALL
3 Report, so we will audit against that. The Standard
4 Review Plan in the same vein for those things that are
5 not in the GALL Report or an applicant chooses not to
6 follow what's in the GALL Report provides guidance on
7 how to perform those reviews and those are, indeed,
8 acceptable.

9 Then we have the Reg Guide, which will be
10 talked about later today, which is basically a generic
11 acceptance of some guidance that the industry has put
12 together under NEI 95-10, which says this is how to
13 physically write your application. It gives the
14 structure, some guidance structure, contents and so we
15 start to look at applications that have a common
16 appearance, and that's been very beneficial for
17 industry. It has been very beneficial for the staff
18 and it streamlines the reviews. It is not a
19 requirement in the regulations. It's an option that
20 applicants can choose to follow. It really does help
21 our review and makes it much better.

22 Now, that I have positioned with the type
23 of documents and how they relate to one another, they
24 are all guidance, that's one acceptable way of
25 satisfying the regulations. The Standard Review Plan,

1 which was initially written back in 2001, documented,
2 at that time, our understanding of the world and how
3 to perform these reviews. It talked about how do we
4 satisfy the regulations, who does what reviews, and
5 has several main portions that exist, scoping and
6 screening of which components, system structures are
7 in the scope of the License Renewal Rule in accordance
8 with the rule.

9 It tells how to perform that review. Then
10 there is the safety review section, Section 3, which
11 is how do you perform Aging Management Reviews? How
12 do you look at your Aging Management Programs? It
13 refers you, at that point, to the GALL document, which
14 is the main focus of this meeting. Then the last
15 section of the Standard Review Plan is the TLAA, Time-
16 Limited Aging Analysis, where any analysis that have
17 a 40 year assumption for license renewal for the
18 extended period of operation, you need to examine
19 those analysis to make certain that they are still
20 valid at the end of the period of extended operations.

21 So those are the main sections of the
22 Standard Review Plan. That's what we wrote in 2001.
23 We've been able to use it since then. But as a result
24 of learning from performing many reviews, I believe we
25 now stand at having completed or have in-house under

1 review, approximately, 50 percent of the vessels that
2 are licensed to operate. We have learned a lot of
3 stuff. We have also changed the structure of how we
4 perform our reviews.

5 We have created the RLEP-B Section, which
6 goes to the sites to perform safety evaluations
7 primarily on those things that are consistent with
8 GALL, perform an audit against those, and those things
9 that an applicant may have identified as having an NRC
10 approved precedent that they are citing as their basis
11 for why something would be acceptable to staff.

12 If they have done that, we do not
13 automatically accept that precedent as a means of
14 saying you satisfied the regulation. And the specific
15 regulation in hand is 54.24(a)(3), which is what we
16 actually demonstrate under our safety reviews as to
17 why these components that are screened into license
18 renewal and recurring Aging Management Review have an
19 adequate program to manage their aging effects during
20 the period of extended operation.

21 So those are what has changed in time and
22 we had a lot of lessons learned. Technically what is
23 acceptable to staff? And we have not always been able
24 to update the GALL document to reflect our current
25 status of technical knowledge. So having set that as

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1 a picture, where do we stand and what are these
2 documents? I'll go on to my presentation and discuss
3 what has changed in the Standard Review Plan. Next
4 slide, please.

5 Three basic things were necessary to be
6 modified in the Standard Review Plan. Changes that
7 correspond to changes in the GALL document. GALL has
8 all the technical to meet. The Standard Review Plan
9 contains certain things such as the criteria for what
10 constitutes further evaluation when it has been
11 directed to be by GALL as be necessary. Those
12 criteria are contained in the Standard Review Plan.
13 They are technical and we have made a change in GALL
14 that changes something in the Standard Review Plan, we
15 would have documented also in those. I'm not planning
16 to spend a lot of time on those.

17 UNIDENTIFIED SPEAKER: If you could just
18 get a little closer to that?

19 MR. COZENS: I apologize. Can you hear me
20 better now? I'm not going to talk a lot about what
21 has been changed in GALL and what got transferred over
22 to the Standard Review Plan, because that will be
23 talked about under our next presentation. Also, we
24 have changed the structure of the Standard Review Plan
25 to reflect the existence of the Audit Teams and their

1 activities. They were not written in the 2000 -- that
2 detail was not contained in the 2001 edition of the
3 GALL, because the group did not exist and the
4 structure of making assignments was different. So we
5 needed to reflect that.

6 Lastly, we've had a lot of other technical
7 insights as we've done the reviews that we wanted to
8 capture as appropriate and we, indeed, have done that.
9 Now, I'll go into a little bit more details. Next
10 slide, please.

11 We've revised Section 3.0 to take care of
12 some of the administrative issues. First of all, we
13 understand the division of who is performing reviews,
14 the authority residing in the PM, the Safety Review PM
15 is making assignments with internal staff on who is
16 going to be performing the reviews and also provided
17 at a level of background in the Standard Review Plan
18 that reflects how do we perform these reviews. And
19 I'll talk a little bit more about that in a moment.

20 And then we also identified something that
21 was an NRC commitment on how we expect to look at
22 exceptions as they relate to -- expectations as they
23 relate to extended power uprates and that resulted
24 from a discussion with the Advisory Committee on
25 Reactor Safeguards and it explains staff's

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1 expectations regarding the extended power uprates.

2 Next slide, please.

3 Section 3.1 through 3.6 contain the
4 methods and acceptance criteria for performing reviews
5 for the safety reviews. These include the topics of
6 reactor cooling system, engineered safety features,
7 aux. systems, steam power conversion and electrical
8 are the major groupings. The changes that have
9 occurred to those sections are common. Change made to
10 one section was made to all six sections from a
11 programmatic process point of view.

12 The specific changes reflect the change in
13 the work split. In addition, it emphasized the -- let
14 me back up a second. The 2001 edition of the Standard
15 Review Plan emphasized primarily Aging Management
16 Program reviews. It was not very explicit on how do
17 you perform an Aging Management Review. The rewrite
18 and revision to the Standard Review Plan now
19 incorporates increased text on how do we perform an
20 Aging Management Review, not just focusing on the AMP,
21 on the Aging Management Program. So that was another
22 of the changes that were made to the Standard Review
23 Plan. Next slide, please.

24 In addition, a lot of the things that
25 we're documenting on our audits and reviews have to do

1 with exceptions or enhancements which an applicant may
2 choose to take with regard to an Aging Management
3 Review that they are considering consistent with GALL.
4 If an applicant choose an exception or an enhancement,
5 it's something that we need to review. We need to
6 technically assess it and make a determination whether
7 or not its an acceptable exception or enhancement.

8 The 2001 edition of the Standard Review
9 Plan did not discuss these particular criteria. We
10 have now introduced some guidance on how to treat
11 these things. First of all, what are they? An
12 exception to GALL, we would be talking about that.
13 But also an enhancement is we have found through some
14 different applications that it is not a universally
15 used term, so we defined it in the Standard Review
16 Plan as those actions that licensees will be taking
17 prior to the period of extend of operation to an
18 existing program, so that during the period of
19 extended operation, that program would be consistent
20 with the program out of GALL that they are claiming to
21 be consistent with.

22 So it's extra actions that don't exist
23 today that would be in the future versus some more
24 broader defined concepts, because that's what we're
25 actually reviewing when we are looking at an oddity

1 for consistency with GALL. We've also updated the
2 tables that are contained in the Standard Review Plan,
3 which are a roll-up of much of the information that's
4 contained in Volume 1 and 2 of the GALL Report. The
5 technical changes that were in GALL need to be
6 reflected in the revised Standard Review Plan and that
7 has, indeed, been done.

8 And lastly, next slide, please,
9 unfortunately, I can see on the television monitor
10 this is not real clear, but hopefully everybody has
11 got a copy of this in front of them. We've modified
12 these tables to hopefully be a little more user
13 friendly. I know in my own use of the Standard Review
14 Plan if somebody wanted to refer to a particular line
15 item in these tables, you would say well, go to page
16 so and so, the third line down. Well, we gave them a
17 unique identifier with numbers 1 through N that if you
18 want to talk about a line item in a table say go to
19 line item 30. It will help us all talk easily about
20 where these things are.

21 So that's a user friendly device. Also,
22 and we'll have more discussion on what this means,
23 there is the last column on the table that has been
24 added called "related item." This has been added so--
25 let me step back. In the 2001 edition, GALL would

1 refer to the tables in the Standard Review Plan. But
2 going from the Standard Review Plan to the line items
3 in the GALL document, there was not a direct linkage.

4 This last column has been created to
5 assist us going from GALL to Standard Review Plan and
6 from the Standard Review Plan to the GALL document.
7 So it is in some standard BWR line items that have
8 been created as a result of this update. It is
9 encoded here and I believe Amy will be talking about
10 those later. Am I correct on that, Amy? That will be
11 discussed at some level. And you will see how those
12 are used. But this will permit you to go back and
13 forth between GALL and the Standard Review Plan
14 easier.

15 So these two new columns have been added
16 to these tables to make the GALL Update more user
17 friendly. And so, at this point, that concludes my
18 prepared remarks. If there's questions, I will take
19 those.

20 FACILITATOR CAMERON: Okay. Thank you
21 very much, Kurt, for an explanation of the
22 relationship among the various documents and how
23 things have changed. Fred, did you want to say
24 anything, at this point? Fred Emerson.

25 MR. EMERSON: Yes, only that we had no

1 presentation for this portion of the agenda that we
2 will provide any detailed comments on the SRP at the
3 end of the comment period.

4 FACILITATOR CAMERON: All right. Thank
5 you, Fred. David, did you have any?

6 MR. LOCHBAUM: Dave Lochbaum. Does the
7 review process for changes to the SRP and/or GALL
8 include a review to see if it has fundamentally
9 affected the staff's decision on past license review
10 approvals?

11 MR. COZENS: Here we go. I think is your
12 question basically are we reviewing licenses that are
13 even issued, based upon changes to these documents?

14 MR. LOCHBAUM: Are changes to the SRP and
15 GALL reviewed to see if they could have potentially
16 affected previous basis?

17 MR. COZENS: As with all regulatory
18 issues, if we find a safety issue that is inherent to
19 whether it be license renewal or to any other activity
20 that we may find, we would go back to an issued
21 license or whatever and that would be this case here.
22 The type of changes that we are talking about, I do
23 not believe would have met that threshold of being a
24 safety issue that required basically a backfit on
25 existing licenses. But if it was identified as such,

1 yes, that would be done.

2 FACILITATOR CAMERON: Well, perhaps, David
3 is asking a broader question than just the specific
4 legal question about a change in a decision, but do we
5 look back at whether our review would have been more
6 efficient? Would we have found anything as sort of a
7 QA check on the changes? David, I don't know if
8 that's what you were trying to get at or whether you
9 were really focused on that. All right. Thank you.

10 MR. COZENS: Thank you.

11 DR. KUO: Well, the question, Dave, I
12 believe you are looking for is that once we made a
13 decision, say today, and there were plants that are
14 going to be licensed two years ago, was it whether
15 this decision would affect those plants or not? Is
16 that the question? We have in the rule, the PAR 54
17 Rule that there is a provision 54-37B, we issue that
18 an IC process on that, that provision basically ask
19 the licensee who has the renewed license make annual
20 update of their SER, I mean, FSAR supplement and
21 identify any new component system or structures that
22 has to do with license renewal in adding to the FSAR
23 supplements and from there on whatever necessary
24 action is taken.

25 So it is covered by that, but what I'm

1 going to say is that we might still have some
2 unresolved issues in terms of a legal point, legal
3 interpretation of that, but we will be working with
4 the industry on that still.

5 FACILITATOR CAMERON: Okay. Thank you,
6 P.T. Kurt, before you leave, just let me see if there
7 is anybody else in the audience who has a question
8 about your presentation. Anybody? Ken, we'll go to
9 Dennis, but let's go to Ken. Did you want to say
10 something in regard to David's question?

11 MR. CHANG: Yes. I would like to add a
12 little bit to the answer to Dave's question, which is
13 in this GALL Update and SRP Update, we cover many of
14 the cases which previously approved as precedents. So
15 that means we supporting GALL. You know, applicant
16 don't have to go to past precedents to get a basis.
17 But in doing that, you discover that not all the past
18 precedents are consistent, because plant condition is
19 different, the purpose is different, so you may find
20 to one issue there are two or three past precedents.

21 Now, which one to follow? That is to your
22 early question again. The right issue, the right
23 method. We look into that. Now, I stay away from the
24 legal aspect. I stay in the technical aspect. So
25 that kind of process would highlight other issue.

1 What issues we looking into which are being used in
2 the present days of the review process, the audit
3 process, which should add to your comments.

4 FACILITATOR CAMERON: Okay. Thank you
5 very much, Ken. Let's go to Dennis Zannoni. Dennis?

6 MR. ZANNONI: Kurt, it's obvious that some
7 applications, license renewal submittals are better
8 than others, so you've learned from that as well.
9 Specifically, could you tell me if the completeness
10 review, SRP or guidance has changed at all? And can
11 you discuss in lessons learned from the applications
12 that have actually been submitted?

13 MR. COZENS: Do you want to address this
14 one?

15 FACILITATOR CAMERON: Okay. Let's go to
16 P.T. Kuo.

17 DR. KUO: Dennis, your question is that
18 because of a variation in the applications, how we
19 perform the acceptance review? Is that the question?

20 MR. ZANNONI: Well, some applications I
21 assume are better than others.

22 DR. KUO: Right.

23 MR. ZANNONI: And what lessons learned and
24 have you changed these new revisions? I haven't read
25 them yet. Is there anything changed in the

1 completeness review area?

2 DR. KUO: Well, it's not been written
3 anywhere yet. Okay. Hopefully, some time down the
4 line we would do that. We will document it. However,
5 from -- we have learned many lessons from the past
6 review, as you said. Indeed, you are correct that
7 some applications are better than the others. So what
8 we are doing now, okay, is looking at the issues that
9 we highlight in the previous license, application
10 reviews. And we are looking for definitions in the
11 new applications when we do the acceptance review.

12 It's a little more rigorous than what we
13 did before. SRP has a checklist of what we ought to
14 look for. It's there. But in the past, we simply
15 looked for whether in the application you addressed
16 this item or not. Okay. But from the past review, we
17 have learned there are several issues that always came
18 up. We highlighted those issues and we are looking
19 for information in those areas.

20 FACILITATOR CAMERON: Okay. Thank you,
21 P.T. And, Dennis, did that answer your question?

22 MR. ZANNONI: Yes.

23 FACILITATOR CAMERON: All right. Great.
24 And, Ken, introduce yourself.

25 MR. CHANG: Ken Chang. I like to add

1 something to response to Dennis' question. Granted
2 some applications are more complete than others.
3 However, at the NRC, we have Audit Teams going to
4 every plant to do the review and audit of those
5 applications. And when we come back we don't just
6 keep those things among ourselves. We have started
7 process called "Weekly Audit Team Leaders' Meeting."
8 We exchange experience learned by the Audit Team, now
9 represented by the team leaders in those meetings, to
10 exchange how we did things and how did we do no this
11 plant and the other team leaders learn from this to
12 improve that process.

13 So hopefully, by reflecting the Audit
14 Teams persistence on issues, the application will come
15 to some uniform completeness or standards.

16 FACILITATOR CAMERON: Okay. Thank you,
17 Ken. Another question over here for Kurt.

18 MR. MACFARLANE: Mike Macfarlane. I'm
19 going to change topic a little bit. I just wonder if
20 you could touch a little bit on what change related to
21 expectations on power uprates? You mentioned that in
22 one of your slides.

23 MR. COZENS: Yes, there is a letter that
24 was written from staff to the ACRS, I'm trying to see
25 I thought I had a reference and I know it's here, that

1 discussed staff's expectations that applicant would
2 have a commitment to review operating experience with
3 extended power uprates as it relates to managing aging
4 effects prior to the period of extended operation.

5 The technical basis for that is that these
6 extended power uprates do not have a long operating
7 history at this point in time and we wanted to assure
8 ourselves that we are giving that reasonable
9 consideration before entering the period of extended
10 operation to assure that anything that is learned from
11 operation in the future has been picked up and
12 addressed in management programs that the applicant
13 would be implementing.

14 FACILITATOR CAMERON: Does that answer it
15 or do you still --

16 MR. MACFARLANE: I think so. So
17 essentially, we're just requesting a new commitment
18 related to prior to extended operation to consider
19 doing an additional review, I guess.

20 MR. COZENS: Possibly, yes.

21 FACILITATOR CAMERON: P.T.?

22 MR. COZENS: Do you want to say something
23 about that?

24 FACILITATOR CAMERON: Okay. Let's go to
25 P.T.

1 DR. KUO: Well, as you know, for license
2 renewal review that the rule basically it says that
3 the current licensing basis will be maintained and
4 carried forward into the license renewal period. So
5 for license renewal review, we are looking for a
6 defined current license and basis. Okay. So if you
7 were to have a power uprate before license renewal,
8 then that power uprate condition becomes the current
9 licensing basis for license renewal.

10 Okay. However, if license renewal comes
11 first and then power uprate comes later, then the
12 current licensing basis for the licensing review is
13 the current power level. Okay. We will not consider
14 any power uprate level. Okay. The review will be
15 complicated, however, if you try to do both
16 concurrently. Say the license renewal what depending
17 on the completion of power uprate, then what it means
18 is that during the license renewal review, the current
19 licensing basis is going to be different between the
20 start of the review and the completion of the review.

21 Okay. So that really adds the
22 complication of the review and also potentially would
23 take more time for us, because we have to re-review to
24 change the current licensing basis. I don't know if
25 that answers your question.

1 FACILITATOR CAMERON: Is there anybody
2 else that wants to understand the relationship or has
3 a further question on the relationship between license
4 renewal and power uprate? Does that basically do it
5 for you or do you have some more?

6 MR. MACFARLANE: That explanation actually
7 confused it a little bit more. If you know when your
8 extended power uprate is being submitted and when, you
9 know, a license would be expected and the timing of
10 that, let's say that that power uprate is going to
11 occur prior to really the completion of the renewal
12 review and you could go in on your application with
13 recognition of here is where we are today and here is
14 where we're going to in addressing those deltas. Is
15 that not something that you are looking for?

16 The reality is this will occur. You know,
17 they are two separate activities and they can overlap.
18 And also, is there a distinction? You mentioned
19 extended power uprate. Is there a distinction between
20 some of these small uprates which are related to flow
21 measurement uncertainties that are, you know, 1 to 2
22 percent uprates, which are much smaller in scope?

23 FACILITATOR CAMERON: Okay. P.T., do you,
24 and I don't know, Kurt, did you want to say anything
25 on this or just go to P.T.? P.T.?

1 DR. KUO: If you were to submit the two
2 reviews concurrently and the power uprate is going to
3 be say completed, expected completed before the
4 license renewal is completed, then during that review
5 after we finish say our SER with open items and then
6 the power uprate review completed, you know, what we
7 are going to review or looking for is the delta. The
8 current licensing base delta between the power uprate
9 and the current power level. So we have to do the
10 review on this delta and see if that affects any of
11 the Aging Management Program or scoping criteria.

12 FACILITATOR CAMERON: Anything?

13 MR. COZENS: Just I thought there was one
14 part of the question, I think I know the answer, I
15 want to confirm, and I don't know if you've covered
16 it. There are extended power uprates with these
17 larger uprates, whereas the 1 and 2 percent are not
18 classified as part of the EPU. Is that correct?

19 DR. KUO: Well, that's the delta I'm
20 talking about. So if you say you are going to have a
21 2 percent power uprate, it may or may not change the
22 current licensing basis too much. If the delta is
23 small, it may not affect license renewal at all. But
24 if you are going to request extended power uprate,
25 okay, then it may change your system operation, change

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1 your Aging Management Program or even change your
2 scoping, your system, whatever. Okay. That's the
3 kind of data we will have to review.

4 FACILITATOR CAMERON: So just to clarify,
5 no matter what the extent of the increase, you always
6 look at whether there is a delta there. All right.
7 Anybody else before we're done with Kurt? Okay.
8 Thank you very much, Kurt.

9 Next we're going to go to a discussion of
10 the GALL and there's a number of different components
11 to that, and we have Dr. Amy Hull who is assisting the
12 NRC staff and Jerry Dozier, and I believe what they
13 are going to do is to give a complete overview, and
14 correct me if I'm wrong on this, Amy, but give a
15 complete overview.

16 We're then going to go to discussion, but
17 the way we're going to do that is I think that we're
18 going to go through it by area and there are some NEI
19 folks who are going to come up and talk to a specific
20 area. When that's done, then we'll go on to everybody
21 and talk about that area, then we'll go on to the next
22 area. Amy?

23 DR. HULL: Correct. I prepared about a 20
24 minute presentation.

25 FACILITATOR CAMERON: Okay. Go ahead.

1 And if you can't hear Amy out there, we'll just move
2 the microphone closer.

3 DR. HULL: Okay. First of all, I want to
4 thank you, P.T., for your kind introduction this
5 morning. I want to thank you and Steve West and also
6 Frank Gillespie for this wonderful opportunity to work
7 as an Intergovernmental Personnel Act appointee in
8 your program. The people I have worked with here in
9 your program and other people at NRC have exhibited a
10 truly high degree of dedication, team work and
11 professionalism. I consider it a true honor to be
12 able to work here with you.

13 Some of my background working with NRC on
14 license renewal begins in about 1999 when I worked
15 with Omesh Chopra and Bill Shack on some of the work
16 related to analyzing the NPAR database that P.T.
17 talked to you about earlier today. My first
18 introduction was having to exhaustively dig out and
19 then evaluate the LERs, Licensee Event Reports, from
20 the context of my background as a materials engineer.

21 To go on, I would like to point out that
22 what I'm talking about is merely as a representative.
23 This has been team work. It has been an amazing
24 project to be on. I would like to give credit to some
25 of the people who have been involved with it and I

1 have enough time, so I'm doing that right now.

2 I want to point out for the extraordinary
3 job he has done on this gargantuan work. Jerry has
4 recently been elected to be NRR Employee of the Month.
5 I want to point out the work that has been done by
6 Parallax. Parallax people such Al Baione, Al, and
7 Russ Wells, Erich Patel and Marv Bowman have done an
8 extraordinary job and the Bases Document is actually
9 coming out. It's a NUREG Contractor Report. That's
10 one of the reasons why it's coming out a little bit
11 later. It's a contractor report. It's not a normal
12 NRC NUREG.

13 I will go on now and present an overview
14 of the changes to the GALL Report. I'm not going to
15 do it sequentially by mechanical systems then by the
16 structural systems, by the electrical systems as you
17 go. I'm giving illustrations of what we have done
18 using examples from the various parts. Next slide.

19 Okay. I tell in this slide about the
20 types of revisions that we have done to NUREG-1801,
21 this draft we're working on now for the Generic Aging
22 Lessons Learned, GALL Report. We wrote three new
23 AMPs, E4, Aging Management Program for bus ducts, E5,
24 Aging Management Program for fuse holders, and XI.E6,
25 Electrical Cable connections not subject to 10 CFR

1 50.4(a), environmental qualification requirements.
2 And I have looked at the NEI presentations and I know
3 that is something that you will discuss after our
4 presentation here.

5 One thing that we have done is in terms of
6 not only adding and modifying AMPs. One of the AMPs
7 that we have deleted, at this point, and have it as
8 just a placeholder is XI.M16, PWR vessels internals.
9 And in GALL, the AMR line items are changed, so that
10 the AMP column, you will see and I will discuss a
11 little bit later, deletes the reference to M16 and
12 instead we have a commitment to apply industry
13 programs to be developed in the future for proper
14 management of reactor internals. This commitment is
15 provided in the FSAR supplement and we have also added
16 in the further evaluation column the requirement for
17 the licensee commitment to be confirmed, and this is
18 explained better in the Bases Document.

19 The roll-up, which is the second bullet
20 where we discuss generalization and standardization of
21 AMR line items, was done to increase internal
22 consistency and standardization of the process. The
23 Excel database, what we call the GALL Master, which
24 was created by Al Baione of Parallax, with which we
25 work, now only has about 650 different line items

1 compared to over a couple of thousand that we had in
2 the 2001 version of GALL. If you look at the unique
3 what we call Material Environment Aging Effect Program
4 (MEAP) combinations, this might drop to under 500.

5 In the third bullet I point out that our
6 primary focus has been on approved precedents, interim
7 staff guidance, extensive NRC review and lessons
8 learned to make the changes and, as you know, as of
9 November 4th, 30 plants have been granted renewed
10 licenses, and the corresponding SERs have provided
11 good documentation of what has been accepted.

12 We look at some of the past precedents.
13 We compare what has been done at different plants. We
14 rigorously analyze them technically and we look at
15 what are propriate changes. In the Bases Document we
16 reference lessons learned from plants such as
17 ANO-1, Dresden, Quad City, Fort Calhoun, Ginna, North
18 Anna, Surry, Robinson, St. Lucie, and VC Summers.

19 I point out as a sub-bullet that one of
20 the things that we have addressed is the non-safety-
21 related 10 CFR (a)(2) systems, structures and
22 components, (SSCs) And we will talk briefly about
23 their inclusion in the GALL database, but I wanted to
24 point out this is still under consideration. Mark
25 Lintz, who is sitting in the front, will talk this

1 afternoon about the NRC staff taking exceptions to
2 parts of Appendix F and of NEI 95-10, the industry
3 guidance on revised 54(a)(2) scoping criteria non-
4 safety affecting safety.

5 So that is something that we have
6 addressed. It's under consideration. It's a work in
7 progress. As Frank Gillespie said this morning, GALL
8 is a living document and this draft that we have, at
9 this point, is where we are today and it's still
10 evolving.

11 I next talk about the common miscellaneous
12 material environment combinations. This is what we
13 sometimes would call a null set and these are found in
14 new sections towards the end of the mechanical systems
15 chapters, these being Chapter IV for RCS, Chapter V
16 for the engineered safety features, Chapter VII for
17 aux. systems, Chapter VIII for steam and power
18 conversion systems.

19 Another thing that we have done is to
20 create a new section at the end of Chapters V, VII and
21 VIII for what we call the external surfaces of
22 components and miscellaneous bolting. And these
23 replace what we had in GALL 2001, talking about carbon
24 steel components. We have included, we have rolled up
25 carbon steel into what we call steel and I will

1 explain that later, and I have a view graph describing
2 that.

3 Another valuable source of information
4 that we have rigorously evaluated, analyzed, had many
5 meetings looking at the different systems and
6 addressing suggestions, were the NEI suggestions
7 provided by Alex Marion of May 11, 2004 and July 30,
8 2004 and we are appreciative of those. Next slide,
9 please.

10 As mentioned earlier, there have been
11 revisions in all sections of NUREG-1801, in the
12 mechanical sections, Chapter IV, RCS reactor vessel
13 internals and reactor coolant system, Chapter V,
14 engineered safety features, auxiliary system, Chapter
15 VII, steam power conversion system, Chapter VIII. And
16 as mentioned before, making these changes was based
17 upon many weeks of NRC contractor review meetings, and
18 the goal was to have any changes made consensually by
19 teams of specialists.

20 So each of these different sections listed
21 here had special working groups. There was also a
22 special working group for bolting and we greatly
23 appreciate the contributions of the people who
24 participated in this and hope that we adequately
25 captured comments and their judgment.

1 I would like to point out Chapter IX at
2 this time. In GALL 2001 there was no content in
3 Chapter IX. It was a placeholder. This time around
4 we're attempting to sometimes define the MEA
5 parameters that help to govern what will be the
6 appropriate Aging Management Program, the structure
7 and/or components, materials environment, aging effect
8 and mechanism. Next slide, please.

9 All right. This is a little bit hard to
10 read, but I want to talk about the new configuration
11 of the AMR line items in GALL 2005, and what I will do
12 is I will go from left to right. Much of the content
13 looks the same. Some looks different. We will look
14 at this diagram starting from the column or field at
15 the far left. Each row or record, it's what we call
16 an Aging Management Review, AMR, line item.

17 Notice that in each of the cells in the
18 item column there are two different identifiers. For
19 example, the first identifier in Chapter V is unique
20 for the section D2, for the BWR emergency core cooling
21 system and is sequential. The number underneath, E29,
22 is the 29th unique AMR line item in the engineered
23 safety features, E standing for ESF, where all such
24 are listed in the GALL Master on the web.

25 Some are repeated in different chapters.

1 If you look at the Bases Document in Appendix A6,
2 which was created by Marv Bowman, starting on page 81,
3 the summary of the MEAP combinations, you can see that
4 there's even more of a roll-up.

5 One of the things that we have been asked
6 is about the difference in numbering and what we plan
7 to retain. My understanding is that we will be
8 retaining both forms of numbering in the version that
9 we're publishing in September.

10 In the second column there is a link,
11 operational on the version that will be posted on the
12 web, to either the corresponding AMR line item in GALL
13 '01 or to the Bases Document where a particular new
14 AMR line item is defended. A new AMR line item will
15 have a P after it. That refers to something, a
16 precedent, as a new item based on a precedent. So EP
17 is a new line item for the engineered safety features
18 chapter. AP is similarly a new line item for the aux.
19 systems.

20 The third column is the structures and/or
21 components. This is pretty much the same as GALL
22 2001, but you will notice that we have grouped
23 together different components and sub-components. For
24 example, piping, piping components and piping
25 elements. And if you go back to Item D2.1-G in GALL

1 2001, it will call out all the specific lines like the
2 HPIC, RCIC, HPCS, LPCS, etcetera, and we have tried to
3 genericize the GALL, so that it's going to be more
4 useful. As was pointed out, in 2001 and also in this
5 version, GALL is not a scoping and screening document.

6 In the fourth column you will see that
7 carbon steel is wrapped up now into steel and that
8 cast austenitic stainless steel (CASS) is kept
9 separate from stainless steel. This is because of a
10 temperature threshold in this case. So you can
11 continue on.

12 In the fifth column, the environment has
13 been further genericized with explanations of terms
14 provided in Chapter IX, which I will talk about
15 several slides from now.

16 In the sixth column there are not so many
17 changes and in the seventh column with the aging
18 effects and aging mechanisms, with the Aging
19 Management Program, AMP, it's in the seventh column,
20 we are trying to appropriately reduce the number of
21 plant-specific AMPs to be evaluated, and this is still
22 a work in progress. The last AMR line item on this
23 slide you have here is EP-27. In the next slide, I
24 will show the relationship between this, EP-27, and
25 the Bases Document.

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1 Okay. Here we have created the new line
2 item to address the selective leaching of copper-alloy
3 containing over 15 percent zinc. So this is a new
4 classification of materials, because before in 2001 we
5 talked about bronze, brass, and various alloys.
6 It's more specific. If you go into the Bases
7 Document, there is a table that explains what was used
8 in GALL 2001, what is GALL 2005 and what is the
9 relationships between the different materials.

10 Anyway, this new AMR line item is found in
11 the aux. systems as AP-43 and the ESF system as EP-27,
12 the RCS system as RP-12 and the steam and power
13 conversion system as SB-29. So this is an example of
14 a new AMR line item that is used in all the mechanical
15 systems.

16 Copper and its alloys, such as copper-
17 nickel, brass-bronze containing less than 15 percent
18 zinc, aluminum-bronze containing less than 8 percent
19 aluminum, such materials are resistant to stress
20 corrosion cracking, selective leaching and pitting and
21 crevice corrosion, and when these aging mechanisms are
22 not at issue, in GALL 2005 we simply identify this
23 material as being copper-alloy.

24 On the other hand, as in this
25 illustration, copper, brass and other alloys

1 containing greater than 15 percent zinc or aluminum-
2 bronze containing greater than 8 percent aluminum are
3 susceptible to stress corrosion cracking, selective
4 leaching, except for inhibited brass, and pitting and
5 crevice corrosion and, thus, we have discriminated
6 between copper and copper containing over 15 percent
7 zinc in the AMR line items, and this is further
8 described also in Chapter IX in the Bases Document.
9 Next slide.

10 Okay. Here is an example from two
11 different chapters, from Chapter VII and from Chapter
12 VIII, of how we have handled situations that refer to
13 non-safety-related 10 CFR 54.4(a)(2) of systems,
14 structures and components. The way we have it in GALL
15 2005 right now, we refer to (a)(2) systems, is
16 actually (a)(2) systems, structures and components,
17 SSCs. So for the purposes of this workshop, we
18 corrected the type on this table and the excerpt that
19 we took here from GALL '05.

20 As is true in many of the changes
21 throughout GALL, this section in the aux. system and
22 these changes are under consideration and they are in
23 progress. Our entire draft of GALL is a work in
24 process.

25 As mentioned earlier, this afternoon Mark

1 Lintz will talk more about Draft Guide 1140 and the
2 NRC exceptions and the proposed alternative to the
3 scoping of non-safety-related piping and supports as
4 specified in parts of Section 4 and 5 in Appendix F of
5 NEI 95-10.

6 As mentioned, in this slide I show two
7 different examples of reference to Category (a)(2).
8 One is in the aux. system where we have 7 AMR line
9 items in this section. An approved precedent exists
10 for adding the material environment and aging effect,
11 based on earlier SERs. The second is taken from the
12 Bases Document description of Chapter IV where we talk
13 about steam dryers and I'll talk about that a little
14 bit more in the next slide.

15 Okay. Operating conditions can effect the
16 integrity of systems, structures and components. And
17 this is an example taken from Chapter IV, reactor
18 vessel internals and reactor coolant system, Section
19 B1 for the BWR, reactor vessel internals, where we
20 have created a new AMR line items for steam dryers
21 composed of stainless steel subjected to a reactor
22 coolant environment susceptible to cracking caused by
23 the aging mechanism of flow induced vibration.

24 In this particular case, we recommend a
25 plant-specific Aging Management Program be evaluated.

1 For plants performing extended power uprate, steam
2 dryers are in scope for under consideration 10 CFR
3 54.4 Category (a)(2) and may exhibit cracking due to
4 flow-induced vibration and therefore require
5 management by a program. In this case, a plant-
6 specific Aging Management Program is to be evaluated
7 to provide reasonable assurance that the components'
8 intended functions will be maintained within the CLB
9 for the period of extended operation. Next slide.

10 As mentioned earlier, there was a focus
11 group that met repeatedly and carefully analyzed the
12 bolting line items in GALL 2001 addressing their
13 Material Environment Aging Effect Mechanism Program
14 combinations and whether it made more sense to
15 reorganize them, regroup them. And as a result of
16 many meetings, one of the things that was decided was
17 to create new sections at the end of several of the
18 mechanical chapters specifically for external surfaces
19 and for bolting.

20 As can be seen from S-33, which is halfway
21 down this AMR table, we do use the aging effect of
22 loss of preload caused by the aging mechanism of
23 stress relaxation. That can be due to stress
24 relaxation creep, gasket crush. This was something
25 that had been discussed extensively during our

1 meetings and I know this is one of the questions that
2 NEI had.

3 Would any of the people who were involved
4 in the Bolting Working Groups like to comment about
5 that at this time? We have them here. No. We'll go
6 on then. Next slide.

7 Okay. My next slide gives an example of
8 the way in which a 2001 GALL AMR line item was revised
9 in 2005. In some cases it seems like we actually
10 created two lines out of one that was found in 2001.
11 For example, at the bottom of the page is the excerpt
12 from GALL 2001 where we have carbon steel and
13 stainless steel grouped together and at the top of the
14 page are two line items separating steel and stainless
15 steel.

16 But the way this has been done, separating
17 them in this way, means that we were able to use the
18 line items E-17 and E-19 many, many different times
19 and that helped to streamline, to standardize, to make
20 more internally consistent what we are doing in the
21 GALL update, and this also reflects then on GALL
22 Volume 1, also the SRP.

23 So as mentioned, the AMR line items were
24 divided, so the materials exhibited the same aging
25 effects. Also notice that we have simplified the

1 structure and/or component in Column 2, and also the
2 environment in Column 4. One, two, three, four, five,
3 Column 5 for GALL 2005, Column 4 for GALL 2001 has
4 been made more simple and closed-cycle cooling water
5 is defined in Chapter IX as expounded upon in the
6 Bases Document, and I will talk about that a little
7 bit later. Okay. Next slide.

8 Okay. One of the new areas that was
9 created in GALL 2005, a new section was called The
10 Common Miscellaneous Material Environment Combinations
11 and this section includes the Aging Management
12 Programs for miscellaneous material environment
13 combinations, which may be found throughout given
14 structures and components. For example, this is taken
15 from engineered safety features.

16 For the material environment combinations
17 in this part, it was felt there are no aging effects,
18 which are expected to degrade the ability of the
19 structure or component from performing its intended
20 function for the extended period of operation and,
21 therefore, no resulting Aging Management Programs for
22 these structures and components are required. So note
23 that under the aging effect/mechanism column, there is
24 none. Therefore, under the Aging Management Program,
25 there is none. Under further evaluation, there is

1 none.

2 Now, some of the environments we have, for
3 example, is gas. What is gas? Gas is defined in
4 Chapter IX, but to repeat it here it's defined as the
5 internal gas environment from air both at atmospheric
6 pressure in the ventilation system and compressed air
7 used as a working fluid, e.g., instrument air,
8 nitrogen, carbon dioxide free inhalant. And this
9 category assumes absence of corrosive species such as
10 chlorine.

11 Another thing we have is air indoor
12 uncontrolled. That is indoor air on systems with
13 temperatures higher than the dew point. Condensation
14 can occur, but only rarely. Equipment surfaces are
15 normally dry. Another thing we have, lubricating oil,
16 copper stable and lubricating oil, no aging effect, no
17 AMP.

18 Lubricating oils are low to medium
19 viscosity hydrocarbons and here we have specified that
20 there is no water pooling and, thus, there is no aging
21 degradation. Air and untreated borated water leakage
22 is on indoor or outdoor surfaces with temperatures
23 above or below the dew point and that's germane to
24 PWRs. Next slide, please.

25 I go on now to start the discussion of

1 what we added in Chapter IX. Okay. One of the things
2 we did in Chapter IX was to add a new definition
3 section for materials, environments, aging
4 effects/mechanisms and selected components as relevant
5 to the different Aging Management Programs. And I
6 have highlighted and underlined. I have put in bold
7 and underlined the first initial of materials,
8 environments, aging effects and programs to indicate
9 that these are called MEAP combinations as mentioned
10 in the second bullet.

11 Simplification and standardization of
12 terms are used within these MEAP combinations to make
13 the AMR line items more generic. This helps to
14 minimize unnecessary detail and allows us to roll-up
15 similar terms.

16 One of the things that was added in this
17 version of GALL 2005, which was not really
18 systematically standardized throughout GALL 2001,
19 there were some variable temperatures where the
20 temperature thresholds for certain aging effects, such
21 as 95 degrees fahrenheit, (35 degrees C) for thermal
22 stresses in elastomers and 140 degrees fahrenheit,
23 (60 degrees C), for stress corrosion cracking in
24 stainless steel and 482 degrees F, (250 degrees C),
25 for thermal embrittlement in cast austenitic stainless

1 steel, CASS. Next slide.

2 Okay. The following is excerpted from
3 Chapter IX where we discussed a standardization of the
4 systems, some of the structures and components terms.
5 The ones I have pointed out here include some taken
6 from electrical and Amar Pal is here, one of our
7 specialists on electrical systems. He helped greatly
8 in the revision of the GALL documents. And we also
9 have a reference here, I want to point out, to the
10 piping, piping components and piping elements.

11 This was a general category created this
12 time around for GALL 2005 that includes various
13 features of the piping system that are within the
14 scope of license renewal. Examples include piping,
15 fittings, tubing, flow elements/indicators,
16 demineralizer, nozzles, orifices, flex hoses, pump
17 casing and bowl, safe ends, sight glasses, spray
18 heads, strainers, thermowells and valve body and
19 bonnet.

20 These were called out specifically in GALL
21 2001 and the various detailed perturbations in 2001 is
22 one of the reasons why there were many, many more
23 unique, different line items and one of the reasons
24 why there was not so much internal consistency in GALL
25 2001 between the various chapters that fall within the

1 mechanical systems area, Chapters IV, V, VII and VIII.

2 As pointed out, the GALL Report does not
3 address scoping of structures and components for
4 license renewals. Scoping is plant-specific and the
5 results depend on the plant's design and current
6 licensing basis. The inclusion of a certain structure
7 or component in the GALL Report does not mean that
8 this particular structure or component is within the
9 scope of license renewal for all plants.

10 Conversely, the omission of a certain
11 structure or component in the GALL Report does not
12 mean that this particular structure or component is
13 not within the scope of license renewal for any
14 plants. This is quoted from GALL 2005. There is
15 something very similar in GALL 2001.

16 The above table that I took an excerpt
17 from defines some of the structures and components
18 utilized in NUREG-1801 and the AMR tables. A complete
19 listing of unique identifiers and their locations of
20 usage in the revised GALL Report is found in Appendix
21 A of the Bases Document, the NUREG/CR accompanying the
22 2005 revision of the license renewal guidance
23 documents. Next view graph.

24 Slide 30 shows some of the standardization
25 of the materials terms. I discussed already how

1 copper-alloys were grouped. The third line shows how,
2 in GALL 2001 we referred to many very specific nickel-
3 alloys. We referred to Alloy 182, Alloy 600, Alloy
4 690, Gr. 688, Inconel 182, Inconel 82, SB-166, SB-167,
5 SB-168, X-750. So in this case what we're doing,
6 we're grouping together the nickel-chromium-iron
7 (molybdenum) alloys such as those Alloys 600 and 690.
8 And this provides greater consistency within and it
9 also expands the applicability.

10 With stainless steel we, again, have a
11 grouping to wrap up those that were earlier included
12 in NUREG-1801, the 2001 version, and some of those
13 that were comprised include the A-286, SA193 B8,
14 SA193-Gr.B8, Type 347, Type 403, Type 416, Type 309,
15 Type 308, you know, Type 304, and it's all listed here
16 and the justification is spelled out in the Bases
17 Document.

18 Steel. For a given environment, carbon
19 steel, alloy steel, gray cast iron, high strength low
20 alloy steel and cast iron are vulnerable to general,
21 pitting and crevice corrosion even though the rates of
22 aging may vary. Consequently, these metal types are
23 generally grouped for the Aging Management Reviews
24 under the broad term of steel. Note this does not
25 include stainless steel, of course. Gray cast iron

1 can also be susceptible to selective leaching and high
2 strength low alloy steel is susceptible to stress
3 corrosion cracking.

4 Therefore, when these aging effects are
5 being considered, these materials are specifically
6 called out. Sometimes in an environment where there
7 will be moisture, galvanized steel, (zinc-coated
8 carbon steel), is also included in this category of
9 steel. Next slide, please.

10 Another illustration from Chapter IX.
11 This is excerpted from GALL Volume 2, Table IX.D. We
12 defined standardized expressions for air indoor
13 controlled, which is the environment to which the
14 specified internal or external surface of the
15 component or structure is exposed, indoor air in a
16 humidity controlled, e.g. air conditioned,
17 environment.

18 Closed-cycle cooling water is treated
19 water subject to the closed-cycle cooling water
20 chemistry program. Closed-cycle cooling water above
21 60 degrees C allows the possibility of stainless steel
22 stress corrosion cracking. Examples of environmental
23 descriptions that comprise this category are such as
24 chemically treated borated water and treated component
25 cooling water.

1 And another term we used in 2001 was
2 demineralized water on one side, closed-cycle water,
3 treated water, on the other side. Another one that we
4 used in the AMR lines in 2001 is chemically treated
5 borated water on tube side and closed-cycle cooling
6 water on shell side. These all fall under closed-
7 cycle cooling water now.

8 Reactor coolant was used variously. We
9 define that as water in the reactor coolant system and
10 connected systems at or near full operating
11 temperature. It includes steam for BWRs. Next slide,
12 please.

13 As pointed out in the beginning slide, one
14 of the things that we did was to revise, to study
15 again, begin to study again the TLAA's and also the
16 AMPs. Some of the revisions that we made to the Time-
17 Limited Aging Analysis, those Aging Management
18 Programs that fall under 10 CFR 54.21(C)(1)(iii), that
19 we have revised include M1, S1, E1.

20 M1 is for metal fatigue of reactor coolant
21 pressure boundary and that was revised. The program
22 description was revised to note that some examples of
23 critical components are defined in NUREG/CR-6260. And
24 I understand this is something that will be discussed
25 a little bit later in NEI's presentation and,

1 hopefully, the NRC staff that revised it will be here
2 to answer.

3 Another thing that was revised was E1, the
4 environmental qualification (EQ) of electrical
5 components. And in this revision the reference to
6 GSI-168 was deleted in the program description. Next
7 slide.

8 Many, many, many of the AMPs were revised
9 in terms of correcting any unclarity, something that
10 wasn't quite clear or wasn't quite technically
11 correct. Many people looked at the AMPs to try to
12 make them as good as possible. We know that this is
13 a work in progress and more work will be done on these
14 to improve them before the publication in September
15 2005, and we appreciate the comments that come through
16 industry groups and through public groups to improve
17 these.

18 One of the AMPs that was improved and
19 modified was that for the Steam Generator Tube
20 Integrity Program, M19. And in that case we clarified
21 the scope of the AMP to make sure that steam generator
22 sleeves and plugs were specifically referenced. We
23 improved references. We made the structures and
24 components more specific and we made it so that plant-
25 specific review of the steam generator tube integrity

1 AMP for these components is not necessary.

2 E5, Aging Management Program for Fuse
3 Holders is one of the new ones that's included in the
4 January 2005 GALL version to address metallic clamp
5 portions of fuse holders. The operating experience is
6 based on operating experience. Operating experience
7 as discussed in NUREG-1760, the Aging Assessment of
8 Safety-Related Fuses used in Low- and Medium-Voltage
9 Applications in Nuclear Power Plants, identified that
10 aging stressors such as vibration, thermal cycling,
11 electrical transients, mechanical stress, fatigue,
12 corrosion, chemical contamination or oxidation of the
13 connections surfaces can result in fuse holder
14 deterioration.

15 The staff has accepted a similar program.
16 This AMP will provide reasonable assurance that the
17 component's intended functions will be maintained
18 within the CLB for the period of extended operation.
19 And one of the authors of this AMP is with us in the
20 audience today. Okay. Next slide, please.

21 In summary, if one was to try to summarize
22 quickly or in a few words, I guess one could say that
23 the types of changes, not the process, not the driving
24 forces, but some of the types of changes that were
25 made to the GALL Report and the SRP for license

1 renewal fall into the following general categories.

2 Of course, we had technical clarifications
3 and corrections as is the next to the last bullet. We
4 standardized some of the MEAP, in other words the
5 material, environment, aging effect and program
6 parameters. We have incorporated NRC positions
7 previously approved in other documents. This refers
8 back to ISGs or SERs or NUREGS or many different
9 sources that we have analyzed that have been created
10 since 2001 that we have looked at to incorporate
11 lessons learned, and that is something that Ken Chang
12 has talked about from his experience as an Audit Team
13 leader.

14 Operating experience. Jerry has been one
15 of the people leading a group of analysts looking at
16 both domestic and international operating experience.
17 He has worked with a team from Argonne National Lab on
18 that. And the other thing that Kurt mentioned that
19 affects not only the SRP, but also consequently Volume
20 1, as reflected in the Bases Document, are
21 clarifications to the audit and review process. And
22 that's what I have. Thank you.

23 FACILITATOR CAMERON: Thank you very much,
24 Amy. Very comprehensive. As I mentioned, we're going
25 to go through the discussion of various areas.

1 COURT REPORTER: Mr. Chair, your
2 microphone.

3 FACILITATOR CAMERON: Thank you. We're
4 going to go through a discussion of the areas, but
5 there were some important points, I think, that Amy
6 made about changes that are what I would call
7 presentation or format changes. So maybe we should
8 see if there's any questions on presentation, format
9 before we get into the individual areas. Anybody have
10 any questions or comments on those types of overview
11 issues?

12 MR. DOZIER: Could we get a comment on
13 maybe the particular fields, this is just an
14 impression, so that we could go forward with this on
15 impressions on is this an improved format? Is this
16 thing user friendly or is there a way that we can make
17 this a little more user friendly?

18 FACILITATOR CAMERON: Good, good question
19 and one not to just think about for right here, but in
20 your written comments, too, to think about. Does
21 anybody have any observations on the new format?
22 Okay. Well, keep that in mind as you prepare your
23 comments.

24 And, Fred, do we have some mechanical? Do
25 you have some people who want to talk about

1 mechanical? And, Amy, why don't you just relax and
2 stay here. Oh, okay, great.

3 MR. EMERSON: Chip, can I borrow your
4 microphone?

5 FACILITATOR CAMERON: Yes, sir.

6 MR. EMERSON: Just for about a one minute
7 explanation. The industry, when procuring the
8 comments, we have at NEI a License Renewal Task Force,
9 which helps provide the interface between the industry
10 and the NRC on license renewal issues.

11 The task force is supported very heavily
12 by three working groups that Dave touched on when he
13 was introducing himself. One covers mechanical areas,
14 one covers civil structural and one covers electrical
15 areas, and all three of these working groups have met
16 recently and devoted considerable amounts of time to
17 a detailed review of the update materials both from
18 September 30th and from January 30th, January 31st.

19 And so what you'll hear is a compilation
20 of the comments that these working groups developed,
21 first the Mechanical Working Group, and we have tried
22 to weed out the things that are going to be the more
23 detailed remarks and just present the high level
24 comments. So with that --

25 FACILITATOR CAMERON: Okay. So what we're

1 going to do is we're going to hear from the Mechanical
2 Working Group and then we'll open it up for
3 discussion, questions from the audience, NRC staff and
4 then we'll go on to the next area. And, please,
5 introduce yourself.

6 MR. WOOTTEN: Yes, David Wootten. Like I
7 said, I represent the Mechanical Working Group and I
8 have Roger Stewart at my side here. It was a large
9 group, about 22 people, representing a number of
10 utilities. Each of those individuals represented
11 people at their respective utilities.

12 FACILITATOR CAMERON: Can you get a little
13 bit closer to that? I think it's on.

14 MR. WOOTTEN: Hello? Okay. There we go.
15 Yes. This particular group decided to talk about
16 these five particular topic areas, which is the next
17 slide. Metal fatigue for critical components, which
18 is a Chapter X item, some Chapter XI items related to
19 Aging Management Programs.

20 We wanted to offer up a couple new Aging
21 Management Programs to eliminate plant-specific
22 things. We have some comments on Gall Volume 2 and
23 then last, but not least, which I think Amy answered
24 our question there, was a question related to final
25 format of the GALL and the SRP at the end there. Next

1 slide.

2 The Chapter X item related to changes to
3 the "Program Description" and "Monitoring and
4 Trending" elements of the AMP suggested the scope of
5 critical components goes beyond those identified in
6 NUREG/CR-6260. The Bases Document does not provide a
7 technical justification for this change, and so the
8 industry would suggest leaving the original wording.
9 Next slide.

10 Related to Aging Management Programs,
11 there is an ISI footnote that was added to a number of
12 the AMPs, M1 and M3 through M9. The footnote added to
13 several AMP program descriptions acknowledges that the
14 ASME Code required under 10 CFR 50.55a changes
15 periodically, but it does not clearly state that the
16 applicant can credit whatever code version is
17 applicable during the period of extended operation.

18 The next AMP item is related to the water
19 chemistry. The guidelines change with experience and
20 as we gain that experience and change guidelines, the
21 utilities generally adopt those new guidance.
22 However, the GALL ties the licensee to a specific
23 edition of an EPRI Guideline and the licensee is
24 forced to take an exception to the GALL AMP. And at
25 a number of the last ACRS meetings, we're trying not

1 to take as many exceptions to the GALL. So therefore,
2 we would recommend the use of or allow us the use of
3 later editions of the EPRI Guidelines.

4 BWR SCC Program, M7. The acceptance
5 criteria in the BWR SCC program description was
6 modified with a newer ASME Code edition and addenda.
7 However, neither the new edition nor the original
8 edition listed in the GALL are consistent with our
9 commitments to NRC Generic Letter 88-01, which
10 specifically lists the 1986 edition, Subsection IWB-
11 3600. So we would suggest revising the acceptance
12 criteria to state that detectable indications to be
13 evaluated in accordance with plant-specific
14 commitments to Generic Letter 88-01.

15 One-time inspections. Detection of the
16 aging effects element of the One-Time Inspection
17 program description was modified to add detailed
18 inspection guidance. The One-Time Inspection Program
19 is applied to code and non-code equipment. However,
20 code inspections are not applicable to non-code
21 equipment. We might use some of those techniques, but
22 it's not required. Industry will provide a suggested
23 revision related to this One-Time Inspection.

24 As far as two new Aging Management
25 Programs, we're going to offer an External Surfaces

1 Monitoring Program, which performs visual monitoring
2 of the system's external surfaces. The program would
3 replace the "Plant-Specific Program" currently listed
4 in numerous line items of the GALL.

5 We would also like to offer a Flux Thimble
6 Tube Inspection Program, which monitors loss of
7 material of the flux thimble tube walls for
8 Westinghouse PWRs. The program would replace the
9 Aging Management Program elements related to Generic
10 Letter 88-09 in Gall, Table IV.B2.

11 Related to GALL Volume 2 issues, one of
12 the issues we have is loss of preload. The industry
13 does not feel that it's an aging effect requiring
14 management for Non-Class 1 bolting. I think we
15 conservatively applied it to Non-Class 1 bolting.
16 However, EPRI states a loss of preload is a design
17 effect and not an aging effect requiring management.
18 In addition, stress relaxation for most carbon steel
19 bolts (B7) is only a concern greater than 700 degrees
20 as stated in the ASME Code. And so we would like some
21 sort of basis for saying that is an aging effect.

22 External issues. The introductory text to
23 the systems in Chapters V, VII and VIII refer to the
24 external surfaces table at the end of each chapter.
25 However, many external surfaces are still within the

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1 individual system tables. The industry will provide
2 a suggested revision, which will consolidate all the
3 external surfaces at the end of the chapter.

4 As we went through all the various line
5 items and compared them to our past LRAs and we came
6 up with new MEAP combinations, so we're going to
7 propose a number of new MEAP combinations based on
8 existing GALL lines and precedents from recently
9 approved applications. For example, heat exchangers
10 with copper with greater than 15 percent zinc exposed
11 to CCW selective leaching. That would be an example
12 MEAP that we would add.

13 Heat exchangers. The designation of tube
14 side or shell side of a heat exchanger limits the
15 applicability of the GALL line item, and our emphasis
16 is to try to get more matches. Heat exchangers can be
17 configured with cooled fluid on either the shell side
18 or the tube side. For a given set of material and
19 environment, the heat exchanger configuration will not
20 alter the aging effects or the AMPs. With tubes, an
21 aging effect needs to be addressed for tubes, such as
22 reduction of heat transfer. That will be addressed in
23 a separate line item.

24 You really can't see the slide, but what
25 we were trying to do at the bottom there was just to

1 show if we just crossed out shell side, made it heat
2 exchanger components, then it would be more general
3 and we could apply it to tube sheets, shell, channel
4 heat, etcetera.

5 Integrate the CASS with stainless steel.
6 Cast austenitic stainless steel is currently treated
7 as a separate line item in GALL. CASS should or could
8 be treated as a subset of stainless steel listed
9 separately only when embrittlement is a concern. This
10 will be similar to how we did for copper-alloy.

11 This will provide consistency with other
12 parts of GALL. For example, copper-alloy with zinc
13 greater than 15 percent and gray cast iron are
14 separate line items when selective leaching is a
15 concern. But in loss of material, it's included.
16 It's included with other things.

17 AMP clarification. Throughout Chapter IV
18 the AMP column of the tables provide criteria and
19 sometimes that criteria is unclear. I have provided
20 an example here. GALL Line Item IV.C2 basically says
21 monitoring and control of primary water chemistry in
22 accordance with guidelines minimizes the potential of
23 SCC, and material selection according to NUREG reduces
24 susceptibility to SCC.

25 But then the next paragraph says CASS

1 components that do not meet either one of the above
2 guidelines, a plant-specific Aging Management Program
3 is to be evaluated. So it's not really clear what
4 guidelines they are referring to under that AMP
5 column, if we had referenced an AMP, and then provide
6 any clarification back in Chapter XI.

7 Component name roll-ups. Next slide,
8 please. The combination of some lines to produce
9 generic lines resulted in structure/component
10 descriptions that included all the components
11 previously listed in the individual lines. These
12 comprehensive lists include components that do not
13 apply to all system/structure tables.

14 For example, this is a BWR line item and
15 we have some items in here that may not be related to
16 a BWR. So if we just left it more generic, piping,
17 piping components, which is defined in Chapter IX,
18 then it would be more applicable for us.

19 The GALL 2005 has some open ended
20 commitments that the industry is a little concerned
21 about. For example, the Nickel-Alloy Nozzles and
22 Penetrations was deleted. In its place in the AMP
23 column there is a requirement now to provide a
24 commitment to the FSAR supplement to implement a
25 couple of things, and then it says staff-accepted

1 industry guidelines. But we are not sure what the
2 staff-accepted industry guidelines are, and so we have
3 a concern with this type of open ended commitment.

4 And the last question Amy already really
5 answered. It was a question related to the
6 alphanumeric identifiers. In order to set up our
7 processes to move forward, we needed to know whether
8 the alphanumeric identifiers would still be used in
9 the roll-up tables in Volume 1, and will the GALL
10 Volume 1 Reference Tables 1a through 6a that lists the
11 generic alphanumeric identifiers and the corresponding
12 unique Volume 2 table identifiers still exist? Okay.

13 FACILITATOR CAMERON: Okay. Thank you.
14 Let me ask Amy or Jerry if they have any questions.
15 Is there anything that you need further clarification
16 on from NEI?

17 MR. DOZIER: Yes, I think I'm interested
18 most in -- my name is Jerry Dozier.

19 UNIDENTIFIED SPEAKER: Is it on?

20 MR. DOZIER: My name is Jerry Dozier. One
21 that I didn't quite understand was the metal fatigue
22 critical components. I just want to understand that
23 a little bit better.

24 MR. WOOTTEN: Yes, it was changed to read
25 any additional critical components in the plant,

1 rather than just those of NUREG-6260.

2 MR. DOZIER: Okay. So I guess for
3 everybody else, what had happened was, I think, the
4 old wording just said include the locations identified
5 in NUREG/CR-6260 and we added and any additional
6 critical components in the plant. So that was a
7 concern.

8 MR. WOOTTEN: Yes, yes.

9 FACILITATOR CAMERON: Okay.

10 MR. STEWART: This is Roger Stewart. The
11 concern is we're not sure we understand what you mean
12 by any additional critical components. We understand
13 the NUREG locations very well. We can deal with that.

14 FACILITATOR CAMERON: So, Jerry, do you
15 understand their concern?

16 MR. DOZIER: Yes.

17 FACILITATOR CAMERON: Okay. Let's go to
18 Ken, Ken Chang.

19 MR. CHANG: Ken Chang. It happens to be
20 this is also the item I have questions to. My
21 question is if the Bases Document provide a technical
22 specification for this change, would the working group
23 change your position?

24 MR. WOOTTEN: It happens when you review
25 it.

1 MR. CHANG: Yes, okay.

2 MR. WOOTTEN: Sorry.

3 MR. CHANG: I'll give you a background on
4 what the technical basis is. Recall that back in the
5 late '70s or sometime in the '80s when EG&G Idaho was
6 given the contract, was given the project to do this
7 study, it approached the four types of reactors, the
8 three PWRs, the one BWR, each one they select an old
9 vintage plan, new vintage plan as the same example.
10 They don't know which one is most fatigue critical,
11 metal fatigue critical. So it happened to be they
12 selected the older vintage and new vintage plan. They
13 do the study.

14 So what it amounts to is it depends on
15 what kind of information and data that those
16 interested vendors provided to Idaho. Your
17 inclusiveness for those locations could vary. It's
18 impossible for anyone to identify among the
19 Westinghouse PWRs to find a set of locations to cover
20 all two-loop, three-loop and four-loop plants. Not to
21 mention that each plant operating different. Each
22 plant has a specific frequently occurred physical
23 changes.

24 So the intent of the 6260 is only to
25 broaden, say for this plant or for this two-loop or

1 three-loop or four-loop, the likely location is this,
2 six locations. Now, when situations change, when
3 loading changes, when operating conditions changes,
4 when material changes, when technology changes,
5 everything varies. So that's why it's -- in the GALL
6 I say as a minimum 6260 location.

7 Now, when you do the minimum, you only
8 meet the minimum if nothing extraordinary happens. I
9 think that is the point I raised with every plant I
10 went to audit. I even pointed out how do you cover
11 this? How do you cover that location? Because those
12 are the locations critical to your plant. What's
13 listed there, you know as well as I know, even EPRI
14 knows that the location in 6260 is no longer varied.
15 It's good. That's a good indication as a first shot.
16 But you won't bank on that for the future. These are
17 the locations for your plant. I can hardly agree with
18 you.

19 Okay. So we will provide the technical
20 staff, the Audit Team will provide justification to
21 the Bases Documents. That's why my question is if we
22 provide adequate basis, as I just outlined, will you
23 change your position or do we still have to continue
24 digging?

25 MR. STEWART: Ken, I think what we're

1 looking for is something a little more definitive.
2 Like we know intuitively if we've got something with
3 the CUF at .9, we need to look at it. But when you
4 say any critical level, what do you define as a
5 critical level? You talking .2, .15? If you can give
6 us something that at least narrows the field down as
7 to what you consider critical, we'll consider
8 withdrawing the comment.

9 FACILITATOR CAMERON: And let's go to P.T.
10 and then we'll go there.

11 UNIDENTIFIED SPEAKER: It's all on the
12 same issue.

13 DR. KUO: Just before I'm going to say
14 what -- what I'm going to say is about the use of
15 edition, but, Ken, I think, after you provide the
16 justification, they will have to look at it. So it's
17 not fair to ask that question right now. Are you
18 going to accept it? They cannot. Okay.

19 As far as the edition is concerned, I want
20 to clarify that. I hope it is once more, because
21 we've been talking about this for so many times. The
22 reason in GALL that we endorsed certain edition of the
23 ASME Code or certain edition of the EPRI Guidelines is
24 because we reviewed the requirements in that edition
25 of ASME Code or in that edition of EPRI line. In the

1 content of an Aging Management Program that we can
2 accept, okay. Now, in the original GALL, in the
3 introduction, if you read it, we said the staff is
4 going to review and compare the requirements between
5 the latest GALL, latest edition and the edition that
6 we endorse in GALL.

7 Okay. It doesn't mean that we simply
8 endorse the ASME Code. Okay. The later edition of
9 the code and the original edition that we endorse may
10 not be totally safe. Okay. We know that we endorse
11 that set of requirements. Then what we do know
12 whether we're going to accept this new requirement
13 without doing the comparison. Okay. If as an
14 individual plant you want to use a different edition,
15 that will be okay, but you will have to do the
16 comparison between the requirements of the edition
17 that you are going to use and the edition that we have
18 endorsed.

19 Okay. The reason we endorse certain -- we
20 endorse an edition of the ASME Code or even the ASME
21 Code is not for the sake of endorse ASME Code. It's
22 to endorse the requirements in that edition of the
23 code. We consider it's an acceptable Aging Management
24 Program. The same goes with the EPRI Guidelines.
25 Okay.

1 MR. STEWART: The comment is directed more
2 towards trying to void exceptions, because I mean, if
3 you've got a specific guideline in there and we're
4 using a later one, we take an exception. And we were
5 just looking to see if there was some generic way of
6 recognizing a particular later edition of the code,
7 which 5055a has provisions and when NRC reviews it and
8 says we can use that later edition of the code.

9 FACILITATOR CAMERON: Let me get P.T. on
10 and then we'll go over to Fred. P.T.?

11 DR. KUO: When a new edition of ASME Code
12 comes out, the staff will do a comparison and see
13 whether there are differences or not. But there will
14 be a time lag as you probably know. You know, we
15 don't necessarily any time have the staff resources to
16 do the comparison of the new edition. Okay. But if
17 you can't wait, you want to use the -- really the
18 latest edition, we haven't been able to do our staff
19 work yet, then you will have to do the comparison for
20 us.

21 FACILITATOR CAMERON: Okay. Let me go to
22 Mike first and then Fred. I think both on the same
23 issue, right?

24 MR. MACFARLANE: In terms of the ASME
25 Code, I guess, from an industry standpoint, it would

1 seem to me that the process should have been that you
2 recognize a point in time where you look at an edition
3 of the code and you accepted it, which, you know, the
4 2001 GALL had that version, and that your process
5 going forward from any code editions past that
6 revision should be making sure that license renewal is
7 adequately addressed. And so as GALL could be
8 rewritten to say as long as you use this version of
9 the code or later, then you're okay.

10 Then you eliminate the need for taking
11 exception. You've got the ongoing problem that the
12 code edition that you're going to have in the period
13 of renewal is going to follow your 5055a requirements.
14 So if I'm renewing a license at, you know, year 25, my
15 code edition at year 40 is going to be quite a bit
16 different just based on the 5055a the way it moves
17 through time.

18 The same thing with EPRI Guidelines, the
19 issue there is that is a recognition of the ongoing
20 program maintenance that we've pulled in, operating
21 experience, and the way we do it is through revisions
22 to the guidelines. That is how the industry manages
23 their operating experience related to water chemistry
24 and pulls in all this expertise and periodically
25 updates these guidelines. And the real question I

1 have right now is whether or not you're saying if we
2 use a different edition is that an exception to GALL?
3 That wasn't really clear.

4 FACILITATOR CAMERON: Okay. Let's hold
5 that question too that was just posed and let's go to
6 Fred, please.

7 MR. POLASKI: Fred Polaski with Exelon.
8 A little bit more on that, P.T., I think a couple of
9 things. Number one, when you read the note, the
10 footnotes that were added into the Aging Management
11 Program it talks about the process for 5055a. And if
12 you read the Bases Document for that change, I believe
13 the words in there say that any version of the ASME
14 Code that has been adopted under 5055a can be used as
15 an Aging Management Program.

16 One of the points of this comment is those
17 words ought to be clearly stated in the Aging
18 Management Program not just in the Bases Document,
19 because they are not 100 percent consistent. The
20 other point that you run into on this is, and I'll
21 give you a specific example of Oyster Creek. Oyster
22 Creek right now is the 1998 version of the code in
23 their ISI Plan. So if I use a 2001 version of GALL,
24 I have no exceptions.

25 If I use a 2005 version of GALL which says

1 use a 2001 through 2003 addenda, I've got to take
2 exceptions to that, because I haven't updated my ISI
3 Program and I won't do that for a number of years.
4 When I do it may be the 2001 version or it may be a
5 later version that's adopted by 5055a. So this is
6 going to be an ongoing problem where people need to
7 identify exceptions for use of the code that has been
8 adopted by the NRC on a 5055a.

9 I think the fix of the problem is the
10 5055a process needs to recognize Part 54 and when the
11 NRC adopts it, adopt it for use, whether it is current
12 term or renewal term, because the plans aren't really
13 any different.

14 FACILITATOR CAMERON: P.T.?

15 DR. KUO: Well, I know your point. I
16 heard your point, but I don't think this is a place to
17 debate at. But I told you what we think and I heard
18 what you said. As far as ASME Code is concerned,
19 edition or this edition or that edition, I'm not going
20 to debate that. We need to think about that. Okay.
21 As far as EPRI Guideline is concerned, I will treat it
22 a little differently, because that is sort of a topic
23 report, if you will. Okay.

24 If we have not reviewed edition, a new
25 edition of certain EPRI Guidelines, we're not going to

1 endorse it. Okay. We will have to wait until the
2 staff finishes its review of the topic to endorse it.

3 MR. POLASKI: P.T., this is Fred Polaski
4 again. I guess on the EPRI Water Chemistry Guideline
5 specifically, those guidelines are not submitted to
6 the NRC for review and approval. They are implemented
7 by the industry. And one of the comments at this
8 point is that in all, and I'll talk PWRs, because I
9 understand them better, every application that's going
10 in as a PWR is taking exception to what's in GALL and
11 all those have been accepted. But his version of GALL
12 did not incorporate that past precedent.

13 Now, EPRI is going to a new water
14 chemistry guideline with people implementing. So it's
15 one of those things that everybody is going to take
16 exception, and I expect they will all be accepted by
17 the NRC, but we're going to be in that process
18 continuously. So I just think we need to look at how
19 those determinations are made or what's an acceptable
20 water chemistry program has made from a license
21 renewal viewpoint. It's not in line with what's going
22 on in the industry today.

23 FACILITATOR CAMERON: Let me just see if
24 there's anybody that we haven't heard from on this
25 issue and then we'll go to Amy and then see if P.T.

1 has something to add. David, do you have anything on
2 this one?

3 MR. LOCHBAUM: No.

4 FACILITATOR CAMERON: Okay. Let's go to
5 this gentleman back -- pardon me?

6 UNIDENTIFIED SPEAKER: Ken is here, too.

7 FACILITATOR CAMERON: Okay. We're going
8 to try to get people we haven't heard from right now.
9 Then we'll go back to all those. Yes, sir?

10 MR. MYER: Chalmer Myer. I guess I didn't
11 hear a real answer to Mike's earlier question. It was
12 sort of applied to the question on the EPRI document
13 also. If a later version comes out and we elect it
14 because it had some appropriate information in it to
15 use it, would that really be an exception to GALL or
16 would it be a clarification that in the review
17 wouldn't be called exception, but maybe additional
18 information?

19 FACILITATOR CAMERON: Okay. Before we go
20 to Amy and P.T. and Ken, is there an answer to that
21 question? Ken? All right.

22 MR. CHANG: Ken Chang. In responding to
23 Mike Macfarlane's questions, I would like to state two
24 viewpoints. One is ASME Code. The other one is the
25 topic EPRI Reports and others. For the ASME Code

1 edition addenda, this is no different from when you do
2 this design analysis in the design stage. Everything
3 you do at analysis is per design specification. The
4 design specification called certain code edition
5 addenda. But in the ASME Code itself it allows you to
6 use later edition addenda of the code later than those
7 specified in the design specification. You can do
8 that.

9 But if you do that, you've got to make a
10 comparison to make sure that every related aspect is
11 adequately covered. So you're not going to go to some
12 -- I speak without microphone.

13 MR. MACFARLANE: In the ISI space, the law
14 requires you what versions of the code you're using.
15 It is not a choice. That has to do with inspection
16 techniques and acceptance criteria. It's different
17 than in design where you're talking about you can use
18 a later design code. But still you go back to the
19 5055a and what has been endorsed. The point that
20 we're trying to make really is you have a process
21 already where you're endorsing these codes.

22 And if you look at the code we're using
23 today in submittal space versus what code we will be
24 using 15 years down the line, let's say, when we hit
25 our 40 year period, you know, 40 year mark period of

1 extended operation, they will be different. And the
2 process itself of 5055a needs to be addressing renewal
3 for ASME Code. That seems like a pretty clear cut
4 item.

5 FACILITATOR CAMERON: Ken, anything else
6 you want to add?

7 MR. CHANG: Well, as regards to the EPRI
8 Report, we review the later edition, we consider that
9 as an exception. But the exception if you explain,
10 you justify it, those can be accepted.

11 FACILITATOR CAMERON: Does this answer
12 your question about the use of exceptions versus your
13 term additional information? All right. Amy, you had
14 something on this?

15 DR. HULL: Mine is a different question.

16 FACILITATOR CAMERON: Let me just see if
17 P.T. has anything else that he wants to add on this
18 issue.

19 DR. KUO: Well, all I'm going to say is
20 really that I heard quite a couple of different views
21 and it may have points that we have to think about it
22 and I don't think we can resolve this issue here. So
23 let's not waste too much of everybody's time here.
24 That's all. We'll think about it and we -- if you
25 want to clarify it later on, we can talk about it, but

1 let's not debate it here.

2 FACILITATOR CAMERON: Okay. Good. Thank
3 you, P.T. Amy, you had a question?

4 DR. HULL: Yes, a very simple
5 clarification. You mentioned new AMPs, Aging
6 Management Programs, one, External Surfaces Monitoring
7 Program, the other the Flux Thimble Tube Inspection
8 Program. Do I understand correctly that industry will
9 provide a draft?

10 MR. STEWART: Yes.

11 DR. HULL: Or NRC?

12 MR. STEWART: That's correct. That's
13 correct.

14 FACILITATOR CAMERON: Okay. There were
15 two additional programs and you'll have a draft on
16 both of those.

17 MR. STEWART: Correct.

18 FACILITATOR CAMERON: All right. Other
19 commentary on mechanical from anybody before we go to
20 the next area? Okay. Good. Well, thank you very
21 much. And why don't we try to get the next area in
22 before we break? And, Fred, do you want to introduce
23 your people again?

24 MR. EMERSON: Yes, the speakers here for
25 the civil structural area will be Partha Ghosal and

1 Mike Macfarlane, both from Southern Company.

2 MR. GHOSAL: Good morning. I'm from
3 Southern Nuclear Company. I'm here to present the
4 Civil/Structural Working Group, just a Mechanical
5 Working Group, Civil/Structural Working Group that's
6 composed of disciplinary from Defined Utilities. And
7 we have reviewed the 2005 GALL and came up with these
8 comments. These are just high level comments and we
9 are just summarizing it.

10 Okay. We have really two items to
11 discuss. One is the corrections to GALL, by which
12 there are some inadvertent errors in the GALL and also
13 we are proposing some improvements to the GALL. The
14 second part is the consolidation of the GALL of
15 Section IIIA and IIIB, actually by the consolidation
16 we reduce the number of items in the GALL and that
17 will help us in the review process. Next slide,
18 please.

19 The corrections to the GALL, we are giving
20 here some examples, and the first example being in
21 Chapter III, which actually addresses the non-
22 containment structure, Class 1 structure like DG
23 Building or the Auxiliary Building, those kind of
24 structure. AMP has used Section XI and actually
25 Section XI, Item IWL is applicable for containment

1 structure only. So we are proposing that corrections
2 be made for the program.

3 Similarly, in the program document when we
4 go to the AMP aging/effect mechanism, they have talked
5 about the aging/effect mechanism that is corrosion of
6 embrittled steel, but when describing the AMP, they
7 have talked about requisite corrections, those kind of
8 discrepancies there.

9 In the second example, we have Section III
10 A6 which is the Water-Control Structures and over
11 there we are saying just to be consistent with other
12 sections, we should subdivide into accessible and
13 inaccessible areas. Just like any other structure,
14 you know. And actually, that would be consistent with
15 A1, A2, A3, A6, A7, all of that, you know, and we
16 propose that that be done, so that it is consistent.

17 One item to mention that is in the water-
18 control structure Reg Guide 1127 has been mentioned,
19 but we are in the program part of it in the Section XI
20 Structural Monitoring Program also has been mentioned.
21 We are really proposing the Structural Monitoring
22 Program. We add it in the AMP column, you know, so
23 that we can match the GALL and expedite the review
24 process, so that we don't have to take any exceptions
25 to the GALL then.

1 Okay. Example three is some of the items,
2 I believe it is related to current base generator and
3 most likely like I have given an example over here.
4 Like in the Mark II containment, which is Section
5 II.B2, you know, we have talked about the coolants,
6 you know, which is applicable for the Mark I
7 containment, you know. So same item has been repeated
8 in the Mark II containment and that's an obvious error
9 and we are proposing to correct that one.

10 For the example 4, the corrections, we are
11 seeing some of the items like galvanized steel and
12 aluminum in air all good environment. There is no
13 aging effect based on the previous SER. And actually,
14 that finding is also substantiated in the GALL Bases
15 Document, you know. So we are proposing a change to
16 that.

17 The next main item we are coming to the
18 consolidation of the GALL. It was in Section III of
19 consist of the main Class 1, Class 2 structure as it
20 lists the components supports, you know. And
21 specifically Section IIIA addresses the structures and
22 IIIB addresses the component supports. And we have
23 seen that this consolidation will eliminate the
24 duplication of the items.

25 Now, what we have done, we have formed a

1 matrix to see the commonality and we have found that
2 the same items being duplicated over and over, you
3 know. So we are proposing here some changes. If you
4 go to the next slide. Yes.

5 You see in this slide if you see the
6 matrix, the items on the left hand side T-01, 02,
7 those are the specific items and MEAP of all these
8 items are the same across the line, you know. And
9 there are some specific different items for A6, which
10 is the water-control structure due to the different
11 Aging Management Programs. So what we are proposing
12 here that we consolidate A1, A2, A3, A4, A5 and A9
13 into one section, and we leave A6 as is. Of course,
14 a different name at the time. And A7, A8 will be the
15 tank structure which showed, of course, the similar
16 structures, you know, similar MEAP.

17 Similarly, in the GALL Section IIIB, which
18 is the component support, Section B1 is ASME Piping
19 and Component, you know, and B1.1 is the subdivision
20 of 1.1, 1.2, 1.3, 1.4, Class 1, Class 2, 3 and AMP
21 components for the PWR. And what we are proposing
22 here that basically we can consolidate 1.1, 1.2, 1.3,
23 as the same items, you know, and we consolidate to do
24 one section as a B1. And B2, B3, B4, B5, B6, which
25 are the other structural support items, like say, for

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1 example, HVAC support, condition support, racks and
2 cabinet support, you know, where the aging/effect
3 management everything is the same, line by line, you
4 know, we consolidated one section, consolidated B2,
5 B3, B4, B5 into one section as non-ASME piping and
6 structural support. Next slide, please.

7 What this consolidation does, I just
8 summarized it, you know. It is actually 145 items
9 consolidated to 56 items. 117 Base Document transform
10 to 47 Base Document without any change in the whole
11 effect of it, you know. So that's our proposal for
12 the change, you know.

13 FACILITATOR CAMERON: Okay. Thank you.
14 Let's do the same routine, so to speak, and see if
15 there are any questions from NRC staff, any major
16 issues that we want to talk about. Amy, are you going
17 to lead off for us?

18 DR. HULL: I have a brief --

19 FACILITATOR CAMERON: And make sure you
20 try to get closer to this thing.

21 DR. HULL: I have a brief question.
22 Again, it's just a clarification.

23 MR. MACFARLANE: Sure.

24 DR. HULL: You mentioned in examples where
25 the, I think you were talking about, consistency

1 between the aging/effect column and the AMP column.

2 MR. MACFARLANE: Yes.

3 DR. HULL: This is on page 5. You state
4 that incorrect aging mechanism listed under the AMP
5 section or the aging mechanism specified on page 5,
6 you'll provide further details later, right?

7 MR. MACFARLANE: Right. What he is
8 talking about is actually the aging effect discussed
9 in the AMP. So if you went back into the AMP section,
10 it doesn't match necessarily the aging effect that you
11 are talking about in the GALL chapter, and so you have
12 a disconnect when you really link the two up.

13 DR. HULL: I understand, but you'll give
14 us further details?

15 MR. MACFARLANE: Yes.

16 MR. GHOSAL: Yes, we have draft of
17 everything. We have marked the consolidation as it
18 has all these comments in detail and we submit it, you
19 know.

20 FACILITATOR CAMERON: Okay. P.T. and then
21 Kurt Cozens. Kurt, you want to go first?

22 MR. COZENS: Yes, I have kind of a concern
23 about some of the things I'm hearing and I want to
24 make certain I properly understand what your intent
25 is. With the level of correction that you are

1 proposing here, one of the things that staff had
2 concern with when we started down this path that we
3 not lose traceability back to the individual type of
4 system groupings, because the way our experiences are
5 related, is we understand how particular components or
6 systems have worked.

7 And this breakdown of the current GALL has
8 retained the subtable levels of the six super
9 groupings and the intent was that our experience is
10 based on certain components. We understand those from
11 a user point of view. And if we roll-up too much,
12 because we could have rolled-up further in other
13 sections, we might lose that experience base. Is that
14 a possibility that might be happening when we roll it
15 up to that level?

16 MR. MACFARLANE: What you're telling me is
17 you're using GALL as a scoping document again. That's
18 pretty much what that sounded like.

19 MR. COZENS: No. The scoping is
20 controlled by the rule. Insights into how the plants
21 operate are contained and how we wrote GALL. That is
22 a true statement. We do look at GALL to see if things
23 are missing, because we have an experience base that
24 is documented there. However, the rule dictates what
25 is scoped in and not scoped in. So GALL can't change

1 that. Yes, there are insights into that that help us
2 see things.

3 MR. MACFARLANE: Yes, if you go back to
4 the tabulations that he was showing and it gets a
5 little lost in that, but what he is trying to show you
6 is they basically are the same component type now
7 named description. And it's just located in a
8 different building. So I'm in a diesel building or
9 I'm in an aux. building or I'm in a turbine building.
10 Now, when you look at civil and the way they are
11 scoped and the way they are managed, you end up --
12 structural monitoring in those areas is what is being
13 used. There is no difference between what building.
14 It is done on an area based-inspection.

15 The description you get is the same and
16 when you actually do an application, you're going to
17 address the individual or you're going to put them in
18 a group together and address them. And that's still
19 done today. What you get today now is people use
20 certain ones of those pieces. So it doesn't change
21 anything, it just allows you to get consistent
22 matches, rather than having it go down to the, you
23 know, note C and D where you're talking about it's in
24 a different building, so it's not really an exact
25 match. It's just the same thing, but it was over in

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1 this building. It puts it all together.

2 MR. COZENS: Would you anticipate that an
3 application would still identify the particular
4 components within the plant in the same form they were
5 in today's applications or would you anticipate that
6 the identification components would be more
7 generalized? You have a shorter listing of
8 components.

9 MR. MACFARLANE: The component type names
10 are not affected by this consolidation, so that level
11 of detail would be the same.

12 MR. COZENS: Yes.

13 MR. MACFARLANE: How you would break your
14 building down, of course, is plant-specific in terms
15 of what buildings do you have and what fall into
16 scope. Generally, people have been laying them out
17 between the containment building is always its own
18 unique item and part of that has to do with how you
19 age manage that. Then you have your other power block
20 structures and then you might have some miscellaneous
21 yard structures. And that's been pretty consistently
22 done and that wouldn't really be affected by this
23 change.

24 FACILITATOR CAMERON: So in terms of the
25 concern about if you're doing two -- are you losing

1 any traceability if you collapse things too far?
2 Which, in your opinion, you're not losing
3 traceability?

4 MR. MACFARLANE: Right. We are not losing
5 any.

6 FACILITATOR CAMERON: All right. Yes,
7 sir, please, tell us who you are.

8 MR. PATEL: Hi, I'm Erich Patel. I have
9 a unique experience phase where I worked a license
10 renewal application. I've done the GALL Update and I
11 also have developed plans for license renewal
12 applications. What you are proposing to me makes
13 sense. It makes the application much easier to put
14 together. It makes the SRP much easier to line up.
15 And I think it makes your audit process much easier.

16 MR. GHOSAL: Right. That's the purpose,
17 yes.

18 MR. PATEL: When I was doing the GALL
19 Update and I looked at Section III and the Section II
20 GALL Updates, it is really repetition of everything,
21 to every chapter as you go into it. So you are really
22 taking the reactor building seven elements that you
23 got and you're taking the building and rebuilding the
24 seven elements with the same component elements of
25 concrete and you're going into the right building and

1 repeating the same things. So I think we need to look
2 at that. But it's a significant change that's going
3 to occur in the GALL Volume 2, Volume 1, the SRP.

4 MR. GHOSAL: The SRP, right.

5 MR. PATEL: And different things.

6 MR. GHOSAL: Right. And just to add, we
7 have marked all the documents, because of these
8 changes, you know.

9 FACILITATOR CAMERON: Okay. Thank you.
10 Let me see, P.T. has a comment or a question.

11 DR. KUO: Yes, I just want to clarify what
12 I heard before. Are you proposing that in GALL we
13 include the Structural Monitoring Program for
14 management of containment?

15 MR. GHOSAL: No.

16 DR. KUO: No?

17 MR. GHOSAL: No, we are saying that in the
18 Section A3, they have used the ISI Program, you know,
19 now, you know, which is not used for the Class 1
20 structure, which is used by Class 1. What I'm saying
21 which is used only for the containment structure. But
22 there is an error in the GALL, they are saying use ISI
23 for the, let's say, auxiliary building, you know, and
24 we are saying we are proposing that should be
25 corrected, you know.

1 DR. KUO: Thank you.

2 FACILITATOR CAMERON: Great. Let's go
3 back to this gentleman right here. Yes, sir, please,
4 introduce yourself.

5 MR. JENG: I'm David Jeng in the
6 Mechanical and Civil Engineering Branch, Division of
7 Engineering. In comment to your proposal to remove
8 item errors from Section III, there is one minor
9 concern, that is novelty, the sheer beauty for the
10 Westinghouse containment still building the foundation
11 is continuous with containment. And there has not
12 been very clear division where containment basemark
13 ends and where the sheer beauty basemark starts.

14 So this aspect has to be reviewed until we
15 are very clear in defining which start and which ends
16 from location. So but your point is well-taken.
17 We'll take a look at that. As to regard the roll-up
18 issue, I sort of share Mr. Cozens' comment. Too much
19 rolling-up would make it very ambiguous and you lose
20 the track of which particular structure you are
21 reviewing. So there are a bit of pro and cons
22 involved in your comments. But again, we would like
23 to take some time to take a look at your comments.

24 DR. KUO: Okay. Thank you.

25 FACILITATOR CAMERON: Thank you very much.

1 Any more issues, comments, questions on structural/
2 civil? Ken Chang?

3 MR. CHANG: Ken Chang. It's just a
4 clarification. This correction process is okay for
5 civil/structure. I hope you don't expand this into
6 some other systems which may really lose the
7 feasibility.

8 MR. GHOSAL: No, it's only for the
9 structures we are talking about, you know.

10 MR. CHANG: I'm not saying okay. Yes,
11 they apply to civil/structure.

12 MR. GHOSAL: Right.

13 MR. CHANG: In some sense.

14 MR. GHOSAL: Yes, yes.

15 FACILITATOR CAMERON: Okay. I just want
16 to make an announcement. There is a call for Tom
17 Greene, Southern Company. I think you need to call.
18 Sam, can you tell him who he needs to call? Okay.
19 Any further discussion on civil/structural before we
20 break for lunch? Okay. Great. Well, thank you.
21 Thank you very much.

22 UNIDENTIFIED SPEAKER: Thank you.

23 FACILITATOR CAMERON: I see we have the
24 NRC fly is here, which we'll have to try to get rid
25 of. Oh, yes, go ahead, Dave.

1 MR. LOCHBAUM: Okay. This is Dave
2 Lochbaum. This has been an important informative
3 discussion. Will the transcript from this discussion
4 be publicly available before the public comment period
5 ends? Thanks.

6 MR. DOZIER: I think it takes -- maybe
7 this guy can explain how long it takes, but my
8 understanding is we get that transcript in about a
9 week. Maybe you could explain.

10 FACILITATOR CAMERON: Usually it's
11 anywhere between three and 10 days, depending on what
12 the contract is that we have. But then we need to put
13 it either, I don't know if you're going to put it on
14 the website.

15 MR. DOZIER: Yes.

16 FACILITATOR CAMERON: Or an Adams, but it
17 is helpful for the public to be able to more
18 intelligently comment to be able to look at the
19 transcript, so I think the idea is to get it there as
20 soon as we can. Jerry?

21 MR. DOZIER: It will be both on the
22 website and in Adams.

23 MR. ZANNONI: What time are we going to
24 reconvene?

25 FACILITATOR CAMERON: Okay. 12:15 or

1 1:15, sorry. We're going to reconvene. But wait,
2 hold on a minute, Dennis, because I don't know how
3 long this will take.

4 MR. KANG: My name is Peter Kang, K-A-N-G,
5 from Office of Research, and David asked me how do you
6 in a way ask us how the Office of Research is fitted
7 in license renewal activities. And basically, we
8 participating most of activities including updates and
9 also weekly we have license renewal meetings and we go
10 over there and learn any particular new issues which
11 we haven't thought about before and then we have three
12 staffs, Jit Vora, that one spoke earlier, and also we
13 have another young intern and the three of us would
14 bring any particular technical issues bring them back
15 to Office of Research and have them look at it, as
16 well as any operating events.

17 And if we pick those important operating
18 events issues, we pick up ourselves or we learn
19 through license renewal or sometimes issues are so
20 new, sometimes P.T. will send those to us to look at
21 it. So on that end, we are connected in a way. And
22 also, all the Office of Research staff participating
23 extensively in the code meetings, ASME Code meetings
24 and look at any ways to improve those codes. So in a
25 way, so those things are a pretty integral part of

1 Office of Research. So I thought I would make this
2 additional remark for the Office of Research. Thank
3 you.

4 FACILITATOR CAMERON: Great. Thank you.
5 Thank you very much, Peter, and we're going to go to
6 Amy in a minute. I just want to -- we're going to go
7 for an hour and 15 minute lunch after we're done. I
8 think we're ahead of schedule here and I would just
9 ask the NRC staff to see if they might be able to
10 clarify an approximate date when, before the end of
11 the day, about when that transcript might be available
12 to people, so that they know how long they have
13 between that and the end of the comment period. Amy?

14 DR. HULL: Yes, I just wanted to add to
15 Peter Kang's comment. We're also greatly appreciated
16 for Office of Research staff actively participating in
17 the working group meetings that we had many, many
18 times during the past year to discuss the different
19 mechanical, electrical, structural and bolting
20 systems. Jerry?

21 MR. DOZIER: And they also contributed the
22 passive component operating experience for the
23 operating experience review.

24 FACILITATOR CAMERON: Great. Thank you
25 very much and let's be back at around 1:20 and we'll

1 resume with electrical. Thank you.

2 UNIDENTIFIED SPEAKER: That sounds good.

3 (Whereupon, the meeting was recessed at
4 11:59 a.m. to reconvene at 1:21 p.m. this same day.)
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A-F-T-E-R-N-O-O-N S-E-S-S-I-O-N

1:21 p.m.

FACILITATOR CAMERON: Well, welcome back, everybody. We're going to get started. P.T. Kuo will join us shortly, but we're going to continue with our discussion of the GALL and we're up to the electrical component, at this point, so we're going to hear from the NEI electrical people. Fred, do you want to introduce them again?

MR. EMERSON: Yes, Steve Schellin is a representative of the Electrical Working Group. He is from NMC and Fred Polaski, I think, everyone knows from Exelon. And Steve is going to give a little bit of an introduction on the kind of effort that they went through to compile the comments.

FACILITATOR CAMERON: Okay. Great. Steve?

MR. SCHELLIN: Thank you. I would like to thank you for the opportunity to address this issue and this forum. I'm Steven Schellin, Nuclear Management Company. I am the lead electrical on License Renewal Project for the Point Beach Nuclear Plant and I'm chairman of the License Renewal Electrical Working Group as part of the NEI Working Group addressing license renewal.

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1 We had a meeting several weeks ago to go
2 through industry issues and the GALL was the major
3 topic of our discussion. We spent most of our meeting
4 going through the GALL items and what I have here in
5 the slides is the higher level summary of the issues,
6 as Amy has pointed out, addressing the new programs
7 and new line items most specifically, and we will be
8 providing specific written comments on other things
9 that are more administrative and technical nuances
10 that we don't believe this is the appropriate forum to
11 get into that level of detail, since most of those
12 are, as I said, administrative.

13 On the first slide or the second slide,
14 our objective in looking at the new programs and the
15 new line items was to be very factual and to look to
16 improve the items that are there to gain closure on
17 issues that are addressing aging and to be consistent
18 and efficient in both the way that a licensee can
19 address them and the NRC can review them. As noted,
20 the three new programs that are identified in the GALL
21 are the E4 Bus Duct Program, E5 Fuse Holders, E6
22 Electrical Cable Connections, which I will address
23 individually.

24 And the new line items are related to
25 high-voltage insulators, switchyard bus and connectors

1 and transmission conductors and based on past
2 precedent, RAIs and SERs we will address those as a
3 group, since they tend to address the SBO switchyard
4 items and have been reviewed extensively in SERs.

5 Next slide, please.

6 The first program E4 Bus Duct really in
7 the industry this is referred to as "Metal-Enclosed
8 Bus" in the ANSI/IEEE standards and we would like to
9 have that nomenclature carried over into any Aging
10 Management Program. Bus duct is used to refer to the
11 subpart of metal-enclosed bus that is the external
12 enclosure and there is confusion when that gets down
13 into a plant in the working level as to what you are
14 referring to, whether it is the insulator, the bus
15 bar, the bus duct or some other support structure that
16 is associate with the metal-enclosed bus.

17 There are very strict standards for
18 development of metal-enclosed bus that specify the
19 construction methods and methods of things such as
20 connections. One of the items that is a key item that
21 we would like to see changed is eliminating the
22 wording in the Aging Management Program that asks for
23 retorquing of bolted connections. This is not a
24 recommended practice in the vendor or bolting
25 practices area of operation.

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1 In fact, EPRI Technical Report 1003471,
2 which we refer to later, was the Electrical Connection
3 Application Guideline, notes that retorquing of bolted
4 connections can result in a higher rate of failure
5 than continuing to rely on the correct design and
6 fabrication of the initial connection. And this is
7 especially true where things such as belleville
8 washers are used, lock washers are used in the bolted
9 connections to maintain the torque, despite changes
10 due to any temperature changes for loadings within
11 normal range of the bus bar and bus itself.

12 The working group spent time on this
13 because it's a very important issue and we are
14 developing a White Paper and revised AMP description
15 which will be provided with our written comments, so
16 that the items here are addressed very clearly. I
17 would also like to point out that the Bus Duct
18 Program, as named an E4, was also put out as ISG 17
19 and published in the Federal Register and so there is
20 some conflict between the comment period of the
21 Federal Register and the comment period of publishing
22 exactly the same thing in the GALL.

23 And our understanding in conversations
24 with the NRC is that if we supplied our comments as
25 part of the integrated GALL incorporation of this ISG,

1 that they would be properly accounted for, rather than
2 having to supply them twice or if the comments weren't
3 received by the Federal Register deadline, they
4 wouldn't be accounted for. So we're going on that
5 premise and understanding.

6 The second new Aging Management Program is
7 E5 Fuse Holders. The fuse holders have been utilized
8 in a small number of plants, two plants that I know
9 of, where they were agreed to by the applicant and
10 included in the SER, but there are other plants where
11 fuse holders were addressed in the Aging Management
12 Review and it was shown that the conditions that would
13 create stressors for the fuse holder, which is the
14 conducting part of the fuse holder cable or equipment
15 connection circuit, those stressors were shown not to
16 be present and a Fuse Holder Program was not required.

17 The AMP and the GALL line item LP-01
18 should be revised to clearly state that if the
19 stressors that result in fatigue of fuse clips are not
20 present, no AMP is needed. A couple of the other
21 concerns in the fuse holder area are corrosion due to
22 boric acid or water leakage. And we have boric acid
23 programs and a(2) for water leakage that adequately
24 cover that and we believe that should not continue to
25 be an issue within the fuse holder AMP.

1 The real surprise that we got when we saw
2 the GALL was the E6 Electrical Cable Connections
3 Program. This did not have a past precedent. It did
4 not have an ISG, either a draft or published ISG, and
5 it was not an item that was covered in prior SERs
6 outside of either the E1 Program, which covers cables
7 and connections, including terminal blocks, bolted
8 connections, things of this nature, and specifically
9 E2, which covers connectors, with regard to important
10 systems, such as nuclear instrumentation, NRMS, which
11 addresses these separately in those important systems
12 where resistance in the circuitry can affect the
13 signal quality or signal relative to the indication of
14 the sensor in those circuits.

15 There is no OE to show significant failure
16 frequency. And as I referenced in the E4 Program,
17 EPRI 1003471, the Electrical Connection Application
18 Guideline, concludes that the connector failures that
19 were looked at in the decade's long period aging was
20 not the failure mode. So we would respectfully
21 request that this be reexamined and that the
22 connection and connector aging management provided in
23 the other programs and addressed in previous SERs be
24 accepted as a basis for managing aging of those items.

25 The other area plant-specific AMPs were

1 not proposed for high-voltage insulators, switchyard
2 bus and connectors or transmission conductors, rather
3 in the line items, those were designated as plant-
4 specific evaluation should be provided for these.
5 We've gone back through the SERs for previous plants
6 that have looked at these and looked at the aging
7 effects that are identified in the table and took
8 those aging effects, looked at the environments and
9 the operating experience.

10 And I have just noted in each of those
11 perhaps the major item that was of concern and why
12 these are in previous SERs no Aging Management Program
13 and no further evaluation is required. High-voltage
14 insulators, one of the major concerns was external
15 deposits such as salt spray or dust or other
16 accumulation creating a conductive path across the
17 insulator was expressed as an aging effect.

18 These deposits are temporary and any
19 discharge are usually considered events. It does not
20 change the insulating capability of the high-voltage
21 insulators. The insulators do not age as a result of
22 these events and there is no degradation. Typically,
23 the precipitation, rain, snow, is shortly dispersed
24 and there may be some corona effects during a rain
25 storm, but there is not a degradation of the actual

1 insulating properties.

2 Switchyard bus and connectors, the
3 materials and fabrication are chosen for long-term
4 compatibility with the outdoor environment and their
5 use in the power industry far exceeds the lifetime
6 that we're talking about in the original 40 years or
7 the extended period of operation of 60 years without
8 any operating experience identification of significant
9 aging failures. Many of these are permanently a fixed
10 connection, either swaged or welded.

11 The process for doing this is well-
12 understood in the industry and it is not a concern for
13 age-related failures in switchyard bus and
14 connections. We also have limited exposure to this as
15 far as the electrical area is concerned, because these
16 typically only come into play in the SBO restoration
17 of off-site power and the loss of off-site power
18 typically is outside of the switchyard and it is event
19 driven and not aging driven, based on again operating
20 experience.

21 Transmission conductors, the items
22 addressed for aging effects have been looked at in
23 previous RAIs. On virtually every plant application,
24 the answers have been referenced to studies done by
25 Ontario Hydro and other entities and the operating

1 experience of individual utilities to prove that there
2 is an 80 year plus lifetime and this has been accepted
3 and noted in previous SERs. We believe then that
4 these three areas should fall into perhaps the benign
5 material environment combinations and noted as no
6 aging management and no additional examination.

7 The last item is kind of in the high level
8 issue going into the administrative issue in that in
9 the 10 characteristics for Aging Management Programs
10 there are a couple in these new programs under
11 corrective actions that have been written as very
12 prescriptive descriptions of a high level of an
13 engineering evaluation. Typically, corrective actions
14 are covered as evaluated previously by the NRC in 10
15 CFR, Appendix B, discussions that we are required to
16 have the evaluation fit the corrective action or
17 discrepancy identified by the test or other item that
18 does not meet the acceptance standard.

19 And this may not involve the level of
20 rigor as described by this prescriptive set of steps
21 and we believe that simply providing the consistent 10
22 CFR, Appendix B, credit as used in the corrective
23 action element in the mechanical AMPs for this
24 consistency will provide that degree of assurance that
25 the corrective actions meet the appropriate standards

1 for resolving any test or aging observed discrepancy.

2 That concludes my remarks. Thank you very
3 much.

4 FACILITATOR CAMERON: Okay. Thank you,
5 Steve. Let's go to the NRC. Are there any clarifying
6 questions that we have? Amy?

7 DR. HULL: Amar, he is our electrical
8 expert.

9 FACILITATOR CAMERON: Okay.

10 DR. HULL: He has worked on this.

11 FACILITATOR CAMERON: Please, introduce
12 yourself, please.

13 MR. PAL: I am Amar Pal, electrical
14 engineering. I was talking the bus duct. I think
15 that --

16 MR. SCHELLIN: Excuse me, could you use
17 the microphone so I could hear you a little better?

18 MR. PAL: -- metal-enclosed bus instead of
19 bus duct, I think we having a problem with that. As
20 far as the second item of concern, eliminating the
21 torquing of the bolted connection. I believe the AMP
22 review describes retorquing, so in retorquing I think
23 that can be done.

24 MR. SCHELLIN: The problem with an either
25 or there is that most of the metal-enclosed bus is not

1 directly accessible for doing a test across a bolted
2 connection.

3 MR. PAL: In that case, I'm wondering
4 whether that should be used like in major events so
5 that there's no loose connections.

6 MR. SCHELLIN: Well, in fact, in many
7 cases those connections themselves are either taped,
8 they are sleeved with a heat shrink material, they may
9 be potted in a poxy, there may be integral sleeves on
10 the bus bar itself and it may not be possible to do a
11 one side to the other measurement of the connection
12 itself and therefore any overall bus measurement would
13 not be meaningful.

14 MR. PAL: If other metal should be used,
15 what kind of metal sleeve? Infrared can be used in
16 the loose connection.

17 FACILITATOR CAMERON: This is a side that
18 we just --

19 MR. SCHELLIN: I think that's to be
20 addressed in the evaluation.

21 FACILITATOR CAMERON: We appreciate the
22 comments and we are going to evaluate the comments.
23 I think Amar is just talking about various other ways.
24 But we haven't made a determination on this issue, you
25 know.

1 MR. SCHELLIN: Exactly. Right. And Amy
2 has noted that this is a work in progress and we
3 appreciate that we'll be able to make some progress.

4 FACILITATOR CAMERON: Do you have a couple
5 of other things?

6 MR. PAL: Yes. Next type just the --

7 UNIDENTIFIED SPEAKER: If you could use
8 the mike?

9 FACILITATOR CAMERON: Yes, you're going to
10 have to hold it just a little closer.

11 MR. PAL: Fuse holders, you mentioned
12 about the Boric Acid Program management corrosion due
13 to leakage. We need some clarification about these
14 two bullets there. Why these are here with the fuse
15 holders.

16 MR. SCHELLIN: When the Boric Acid Leakage
17 Programs are addressed in the NRC review and in our
18 development of those Aging Management Programs, we
19 specifically include electrical, examination of
20 electrical comment -- components, excuse me, of
21 electrical components that may be impinged by any
22 leakage that when the leakage is found a thorough
23 evaluation will be done under the corrective action
24 portion of the BAC Program to evaluate its effect and
25 consequences and that would address.

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1 MR. PAL: I believe we are talking about
2 fuse holder AMPs. And I don't think in the fuse
3 holder AMPs any mention of boric acid leakage. So
4 this is two different subjects to me.

5 MR. SCHELLIN: Okay.

6 MR. PAL: How you know the boric acid
7 leakage to the fuse holder AMPs.

8 MR. SCHELLIN: I think we can address this
9 in our specific written comment regarding corrosion of
10 the metal clips, that is the concern, corrosion of
11 metal clips, corrosion mechanism due to moisture,
12 either water or boric acid.

13 MR. PAL: And as far as your first item on
14 the ISG pipe clearly stated that you have the choice
15 to address all the stressors, why it is not applicable
16 to your plant or you can follow the AMP.

17 MR. SCHELLIN: Thank you.

18 MR. PAL: Now, next, electrical cable and
19 connections group. I agree that we could not find any
20 way in this, but our experience shows that these
21 numerous failures occurred throughout the plant. It
22 may be due to the nature of these connection failure.
23 It was not reported in the LER or no RAIs written, but
24 you have to look whether these failures did occur in
25 the plants or not. But we find that it is the true

1 statement that these failures did occur numerous
2 times.

3 There is documents, Sandia 96-0344. It's
4 also mentioned in the AMP and they reported numerous
5 failures of the bolted connections. Okay. And that's
6 the reason the E1 Program, which covers cables and
7 connections, that does not address these failures, so
8 you need a specific program to add these connection
9 failures.

10 MR. SCHELLIN: We will provide some
11 written comments that relate that to the EPRI Report
12 that looks specifically at connections.

13 MR. PAL: The Sandia Report 960344.

14 MR. SCHELLIN: Yes, we'll relate the
15 Sandia to the EPRI Report.

16 MR. PAL: On one side is the main issue
17 here. Now, it's a plant-specific program on the high-
18 voltage insulators, switchyard bus connections and
19 transmission conductors. Our experience was that most
20 plants have their programs, switchyard programs, which
21 looks into the loose connections or insulator, salt
22 deposit or any pollution or anything like that and
23 they do have programs to remove those or report those
24 or lose the bolt connections. So the program is just
25 there, so we are just talking about the same aging

1 mechanism and aging effects and these are already
2 managed, and so we are asking for the same program to
3 be addressed here.

4 And also, if you look at the Bases
5 Document, you will find a number of operating
6 experience mentioned and precedents also. A lot of
7 licensees did mention that they do have a program to
8 manage those.

9 MR. SCHELLIN: I will acknowledge there
10 are some general maintenance practices that are done
11 in the switchyard for economic reasons, but they are
12 not directly addressing aging or typically addressing
13 event driven items, and we can address those in
14 written comments.

15 MR. PAL: Okay. That's all I have to say.

16 MR. SCHELLIN: Thank you very much.

17 FACILITATOR CAMERON: Thank you. And
18 let's go up to Mike.

19 MR. MACFARLANE: Mike Macfarlane. Just as
20 a general kind of observation of -- electrical is a
21 good example of it, but you see it in some of the
22 others. There's a lot of past precedents out there
23 from plants where we have been able to show our given
24 plant environment doesn't have the stressors that lead
25 to these aging effects, and the way you have

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1 structured GALL in this rewrite is you haven't
2 included those options.

3 In other words, you know, what you have
4 gone straight to here is an aging effect and program
5 and there is not a separate line item that deals with
6 the more moderate environment where we have been able
7 to show and justify and there's a lot of precedents
8 out there from the staff that it was okay that we do
9 not have the aging effect.

10 And that's really what they are driving to
11 here, is to acknowledge the way this has been handled
12 on these past applications and provide -- you know,
13 the right place that you mentioned earlier that one of
14 these programs says well, the program itself says, you
15 know, if you address these stressors, then you don't
16 have to have a program. Well, that's not the right
17 place for it, because you're saying I have a program
18 and now my program is saying I don't need a program.

19 The place for it is in the line items or
20 a discussion item or something to that effect to where
21 we can, within the application, provide you the
22 information of why there is no aging effect consistent
23 with what has been done on all these past applicants.
24 And that's really what they are driving to here. Most
25 of this stuff has been dealt with by numerous

1 utilities and accepted by the staff.

2 So it's not new stuff, but the way the
3 GALL is structured right now, it leads you to I'm
4 taking an exception when in reality there is this past
5 precedent out there that if it's acknowledged in GALL,
6 we can match to that item and provide the basis of why
7 we matched that item. And then it should provide the
8 staff what they need and it gives us what we want. So
9 that's just kind of a general comment, but
10 particularly around electrical.

11 FACILITATOR CAMERON: Thank you, Mike.
12 And, Steve, do you have enough of an indication about
13 some of the things that you will need to address based
14 on the comments that are made?

15 MR. SCHELLIN: Yes.

16 FACILITATOR CAMERON: All right. Good.
17 Jerry?

18 MR. DOZIER: I just wanted to make a
19 general comment on as far as when we were developing
20 some of these line items what types of discussions we
21 had and, as many people have mentioned, you might say
22 well, there has been applications where we have
23 accepted a certain item.

24 Now, when we were going in these groups,
25 the question was not did we accept it in a particular

1 application, but can we accept it generically? And we
2 ran across a few things and I think Amar could
3 probably give me a better -- electrical is my weakest
4 area, so I will probably need to defer to Amar,
5 because we put him to the test. We said Amar, we have
6 accepted this four different times. Why can we not
7 accept this generically?

8 And he went back to the SER and he said
9 well, the reason that we could accept this is they
10 didn't point necessarily to a program, but in their
11 description they indicated that they had done some
12 type of special maintenance on, I think, some grease
13 or something like that, coating that was on a
14 particular piece of an item.

15 So just because we had a precedent didn't
16 mean that, you know, in this process that we accepted
17 that as the way we're doing business. We tried to go
18 further into the reason that we accepted it and then
19 we answer the question could we accept it generically?

20 So that is why, you know, maybe in some of
21 these the industry may be wondering well, why did they
22 accept it before and now when we send this in, they
23 don't accept it more, and I just wanted to explain
24 that, a little bit of our process on what we were
25 thinking as we went through these groups.

1 FACILITATOR CAMERON: And, Mike, any
2 comment on what you just heard from Jerry in regard to
3 the point that you were trying to make? I'll bring
4 this up to you.

5 MR. MACFARLANE: We're really talking
6 about trying to go that next step and just what you
7 talked about is the staff has looked at this and they
8 know what the requirements are for it to be acceptable
9 to the staff. And so why can't we capture that in
10 GALL, so that, you know, we're getting this
11 consistency.

12 You know, if I can show you this and
13 provide you this information then here I'm matching
14 GALL. It has been previously approved by the staff
15 and it puts it in the consistent with GALL space
16 instead of, you know, this additional review, which is
17 what we're trying to do. We're trying to get this
18 more streamlined.

19 Every plant has had to go through this so
20 far and by taking the approach of we're just going to
21 take the worst case scenario and not address these
22 other plant-specific type environments, it's not
23 really plant-specific, but just the general
24 environments these plants have, you haven't gained
25 anything, because everybody is going to take an

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1 exception to this and is going to give you those same
2 arguments back, which the staff is already aware of,
3 and it's going to be just back in that same space. So
4 you didn't gain anything.

5 So the issue, I guess, is by taking that
6 approach you're not getting the benefit of this effort
7 that you really were trying to get.

8 FACILITATOR CAMERON: Thanks, Mike.
9 Jerry, does that --

10 MR. DOZIER: Understand.

11 FACILITATOR CAMERON: Okay. Amy, did you
12 want to say anything?

13 DR. HULL: No.

14 FACILITATOR CAMERON: Okay. Let's go to
15 Kurt. Let's go to Kurt and then we'll go up there.

16 MR. COZENS: One is a comment and one is
17 a question. First of all, if you were able, in your
18 mind, to package what you thought the criteria might
19 be that would stimulate the discussion on staff and
20 resolving your concern about what might be a generic
21 acceptance criteria. So I would encourage you to
22 think based on your understanding of what acceptance
23 criteria might be to put that in a public comment and
24 then we could give that some further consideration.
25 It would really help the process.

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1 Steve, on the fuse holders there was two
2 environments that you had mentioned that were
3 addressed, I believe, in the AMP. One was leakage of
4 borated water, which you pointed out the Boric Acid
5 Program might be an appropriate program. The other
6 was moisture in general of corrosion, and I don't
7 believe I heard you explain how you would manage the
8 moisture component, which would not necessarily be
9 managed by the Boric Acid Program. I was wondering if
10 you could elaborate on that?

11 MR. SCHELLIN: I think what we're talking
12 about here is defining the parameters of what would be
13 acceptable to the staff as a benign environment such
14 as absence of water from the immediate area of the
15 fuse holders, non-condensing atmosphere using the
16 definition for that from the appendix and not subject
17 to spray from an (a)(2) environment.

18 From what I have heard in the comments
19 here and from what Jerry has said and Mike has said,
20 I think that would -- you know, if we were to give you
21 those parameters, a perfect example would be at Point
22 Beach we have some 13A bus switch gear combinations
23 that are in a building that is separate from the rest
24 of the plant. There is no water in the building. The
25 rooms are air conditioned. The rooms are heated. The

1 bus has heaters to ensure non-condensing. There is no
2 reason that there should be any aging exhibited in
3 that metal-enclosed bus.

4 And if we were able to define that and put
5 that in the application that way, then you would be
6 able to say okay, well, you have met the threshold.
7 No AMP is required for that.

8 FACILITATOR CAMERON: Okay. Thank you,
9 Steve. Yes, sir?

10 COURT REPORTER: Please, introduce
11 yourself.

12 MR. NGUYEN: My name is Duc Nguyen from
13 the Electrical Engineering Branch. I just have some
14 comment about the XI.E5 fuel holder. You say that the
15 Boric Acid Corrosion Program includes a connection and
16 the question I have, that I think that this boric acid
17 corrosion only applicable to boiling water reactors
18 not pressurized. Huh?

19 UNIDENTIFIED SPEAKER: Pressure, BW.

20 MR. NGUYEN: BW, pressurized not boiling.
21 Okay? So technically for this I think is not
22 applicable for fuel holder, because some of the plant
23 they don't have in the connection, they say, because
24 the boric acid corrosion is not applicable in this
25 case.

1 Another thing is if you read about the
2 I85, the staff issued the I85 and in there we have a
3 statement that if the applicant can demonstrate that
4 they don't have any question at all, okay, then they
5 don't meet the Aging Management Program and the staff
6 in the previous SER we brought up on that one, because
7 this is plant-specific. So every question in IC
8 unique to address, but when it comes to the AMP, when
9 you require the AMP, we don't say why we don't need
10 the AMP. When you have an AMP then you have to follow
11 the XI.E5.

12 If you don't need the AMP, provide a
13 justification according to the I85 why you don't have
14 corrosion, why you don't have vibration, why you don't
15 have fatigue, because some plants they don't remove
16 the fuel element. They disconnect the circuitry by
17 some kind of breaker, so the fatigue is not
18 applicable. But some plant they remove the fuel
19 element when they do the maintenance. So this is
20 plant-specific. So as long as you attract that to us,
21 we agree. But we cannot apply generically across all
22 the applications. Okay?

23 MR. SCHELLIN: Okay.

24 MR. NGUYEN: The other thing that I had a
25 comment is the problem we have with the SBO recovery

1 path. A lot of applicants when they send in
2 application they say no aging effect for this
3 component. But we know that for the transmission
4 conductor, corrosion is a problem. The transmission
5 conductor ED, aluminum, conductor steel reinforced,
6 and we know that the steel reinforced will corrode
7 after some period of time.

8 So you need to tell us why corrosion is
9 not a problem. We are not going to buy off on no
10 aging effect, because we know that corrosion is a
11 problem for that. So provide some justification why
12 you don't need the AMP, okay, but say they have no
13 aging effect, we cannot buy that argument, because we
14 know that corrosion is an aging effect.

15 Another problem is for the high-voltage
16 insulator. We have several events. Brunswick is one
17 of them near the ocean, and we see the salt deposit in
18 the aging effect. It's not an event, because, you
19 know, when the plant is near the ocean and when the
20 ocean water evaporate, it deposits salt in the
21 insulator. So that also is plant-specific.

22 We cannot say they have no aging effect,
23 because we saw a lot of -- we have information now
24 that says that you have a problem with some of the
25 deposits. So we're looking for some justification, so

1 that is why we put it in the GALL this is plant-
2 specific. Some plants is not near the ocean. You
3 don't have problems with salt deposit. Okay? So
4 that's the only comment I have. Okay. Thank you.

5 FACILITATOR CAMERON: Okay. Thank you
6 very much. Steve?

7 MR. SCHELLIN: We understand exactly what
8 he is stating and I think we can provide comments to
9 those items.

10 FACILITATOR CAMERON: Okay. Great. Jerry
11 and then we'll go over to Peter.

12 MR. DOZIER: Just a question. Actually,
13 this reminds me of our discussions, our electrical
14 discussions, when we were actually naming and coming
15 up with the name bus duct. I think those that were in
16 there, that was an interesting time on exactly what we
17 called the particular item.

18 So I want to know what ANSI/IEEE standard
19 you're actually referencing here. Do you know what
20 that number is?

21 MR. SCHELLIN: Roger, you have the number?
22 It's in my briefcase.

23 MR. DOZIER: Okay.

24 MR. SCHELLIN: We can provide that to you
25 at a break.

1 MR. DOZIER: Thank you.

2 FACILITATOR CAMERON: Okay. So we're
3 going to get the number, the specific IEEE standard.
4 All right. I'll mark that so we don't forget. Peter?

5 MR. KANG: Peter Kang in the Office of
6 Research. The last page on those corrective actions
7 of 10 attributes we're supposed to look at, the
8 corrective actions, but most of electrical issues
9 requires a full verification of this Aging Management
10 Program. Some of them requires testing. But on the
11 other hand, there is various tests. There is no one
12 way testing, a test, to satisfy that requirement.

13 So I think the staff is having -- putting
14 not like a Mechanical Aging Management Program. You
15 can refer a program or a code, but in the electrical
16 areas, a lot of tests we don't have any specific names
17 for, but there may be some new state of the art
18 testing we will come, could come.

19 So I think the way staff was putting in
20 this was more general. They put some engineering
21 evaluation, which can detail enough to verify the
22 aging effects, that no aging effect is present. I
23 think that's how they are trying to do it. So I don't
24 know other ways to clarify this.

25 MR. SCHELLIN: Our comment says that,

1 basically, the 10 CFR 50 requirement to dispose of
2 corrective actions identified as part of meeting the
3 QA Program will provide an appropriate level of
4 analyses rather than having the full, let me say full
5 blown multi-step prescriptive description of an
6 engineering evaluation embedded in a specific Aging
7 Management Program.

8 We recognize that in some cases you may
9 have to do that full scope, but in other cases you may
10 be able to do a much shorter engineering evaluation
11 that does not involve those and here you have
12 committed to meet all of those other steps that really
13 aren't applicable to resolving the difference between
14 the test and the acceptance criteria.

15 So that's all we're saying, that yes,
16 those are very good steps for an engineering
17 evaluation. We don't disagree with that. It's just
18 to be prescriptive in a particular AMP is binding up
19 the ability to respond properly to the level of
20 discrepancy between test and result.

21 FACILITATOR CAMERON: All right. Let's go
22 to this gentleman and then we'll go back over there.
23 Yes, sir?

24 MR. NAIDU: My name is Kamal Naidu. I am
25 taking -- I don't know whether it's working or not.

1 FACILITATOR CAMERON: It should be.

2 MR. NAIDU: This is with reference to your
3 broad description of bus duct. Bus ducts can be
4 segregated bus ducts from the generator to the main
5 line. It can be bus ducts inside the switchgear. It
6 can be any bus ducts. Most of the bus ducts, which I
7 have seen, were installed in the field by field
8 technicians. Now, when they install it they bolt the
9 bus connections.

10 We had a problem. We had experienced bus
11 duct problems and that is one of the reasons why we
12 got involved. They never specified which bus duct it
13 was. Was it the main generator to the line bus duct
14 or the bus ducts inside the switchgear, for instance
15 4KV or 13K switchgear?

16 As you rightly said, bus ducts are
17 various. They are wrapped. There are so many
18 variations. There are individual bus ducts. Our
19 concern is not for you to go and open up these
20 connections and see and retorque it to the
21 manufacturer's specifications, but to make sure that
22 due to vibration or some other instances that they
23 were loose.

24 In this particular case where we had an
25 accident or an incident was that the bus duct was

1 loose and it vibrated. And as you know, they attract
2 each other if they are not spaced properly. We are
3 also concerned with the new upgrade program that you
4 are going to generate more, so to speak, with the same
5 kind of authority.

6 In here I would like you to consider when
7 you reply to our suggestions that you take this into
8 consideration. The staff is not asking you to go and
9 unwrap them and retorque it to the manufacturer's
10 specifications. We want to make sure that they are
11 tight, they are not loose and they don't generate hot
12 spots, as they are called. Would you, please,
13 consider that in your deliberation?

14 FACILITATOR CAMERON: Thank you. Yes,
15 sir, you have some more for us?

16 MR. NGUYEN: You suggest that we view the
17 only very short statements that the corrective actions
18 should be covered under 10 CFR Part 50, Appendix B.
19 But in the Aging Program for the electrical, we also
20 require you, for example for the E1 Program, if you
21 found a problem with the accessible cable and
22 connection, we require you to look at the inaccessible
23 area would have the same localized environment.

24 I am not sure that Appendix B, 10 CFR Part
25 50, Appendix B, will go to that detail, because some

1 specific AMP in electrical probably goes beyond what
2 requirement, Appendix B, that is the one that I
3 mentioned. Unless you can show me that the 10 CFR 50,
4 Appendix B, also mentions that, then, you know, I
5 think we should maintain whatever in the current GALL,
6 because that is some specific thing that we require
7 the applicant to look beyond the accessible area, you
8 know, to look at inaccessible area to see if you have
9 the same problem or not. Okay. That's the only
10 comment I have. Thanks.

11 FACILITATOR CAMERON: Okay. Thank you.
12 Hopefully, this discussion gave the staff some things
13 to anticipate and think about in advance of your
14 written comments and, hopefully, it provided you with
15 some ideas of the type of additional information or
16 issues that you might need to address in your written
17 comments. But I think that we have one more comment
18 from P.T.

19 DR. KUO: Yes, I just have a general
20 comment here. You know, we are trying to develop this
21 GALL as a guidance document as one of the acceptable
22 methods that staff would consider acceptable. Your
23 option, that you can propose anything that will
24 demonstrate that your program is effective managing
25 the aging effect. We are not requiring you to

1 necessarily use the GALL Program. It's only guidance.
2 It's the standard that the staff is using to measure
3 from what you proposed, because I heard the words
4 required. I just wanted to clarify that.

5 FACILITATOR CAMERON: Okay. Thanks, P.T.
6 And of course, your comments apply to the GALL
7 generally and not just to electrical. Okay. I think
8 we're finished with the electrical and finished with
9 the GALL discussion. Fred, do you have anything you
10 want to add? Okay. Thank you, Steve, thank you,
11 Fred.

12 MR. SCHELLIN: Thank you.

13 FACILITATOR CAMERON: And thank you, Amy
14 and Jerry. And we're going to move right into the
15 next presentation. Mark Lintz is going to join us and
16 talk about changes to DG-1140 and NEI 95-10. Mark?

17 MR. LINTZ: I am Mark Lintz, as stated,
18 and I will present an overview of Draft Guide-1140.

19 COURT REPORTER: Your mike.

20 MR. LINTZ: I am still Mark Lintz and I am
21 going to present an overview of Draft Guide-1140.
22 Just for background for those people who don't know,
23 we have members of the public here, I understand, a
24 Draft Guide -- oh, I'm sorry, next slide, please.

25 A Draft Guide is a Regulatory Guide that

1 is out for public comment. When a Regulatory Guide
2 goes out for public comment -- well, let me back up
3 even further. Any document is open to comment at any
4 time, but when a Regulatory Guide in particular goes
5 out for public comment, we change the designation,
6 Draft Guide, and we give it a separate number just for
7 added emphasis for the public's benefit.

8 Then so far as a Reg Guide is concerned,
9 a Reg Guide has many functions, but the purpose of the
10 Reg Guide that applies in this case is to provide
11 guidance to the industry or to applicants on
12 implementing specific parts of NRC regulations. And
13 as we have noted previously several times, the current
14 Regulatory Guide that is applicable to license renewal
15 is Reg Guide 1.188. When Draft Guide-1140 receives
16 comments, when they are incorporated, it will revert
17 back to Reg Guide 1.188, Revision 1. Next slide.

18 Draft Guide-1140 is the standard format
19 and content for applications to renew nuclear power
20 plant operating licenses. The purpose of this Draft
21 Guide is to endorse, with exceptions, industry renewal
22 document NEI 95-10, Revision 5. Next slide.

23 NEI 95-10 is the industry guidelines for
24 implementing the requirements of 10 CFR Part 54, the
25 License Renewal Rule. The purpose of NEI guidance is

1 to provide industry with a uniform and efficient
2 process, in this case to obtain a renewed license.
3 This document contains guidelines for identifying
4 systems, structures and components within the scope of
5 10 CFR Part 54 and their functions that are subject to
6 Aging Management Review and that to assure the
7 maintenance of aging effects. Next slide.

8 As you can tell from the title, NEI 95-10,
9 this is the product of the Nuclear Energy Institute.
10 It's their primary product. There has been
11 coordination with the staff with this as in other
12 documents for a period of time. These changes that I
13 have identified here are the primary changes from the
14 current revision. There are many other minor changes
15 that have been made that are simple updates or perhaps
16 correcting typos and this sort of thing.

17 But the changes identified here are the
18 primary ones and these have been endorsed by the Draft
19 Guide. They are, first of all, a standardized format
20 that changes the organization of the application.
21 This is to reduce the complexity of the overall
22 project.

23 For members of the public, an operating
24 plant can have four to five score systems. The GALL
25 will identify between three and four applicable Aging

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1 Management Programs and there will be thousands of
2 line items identified. So to reduce this to a
3 manageable size, we want to standardize what we can to
4 the extent that we can without compromising safety.

5 The next change we made is in the scoping
6 process, and it's a simple thing as to provide or to
7 require the applicant to provide drawings, to describe
8 the functions of the systems, structures, and
9 components, and to list those components that are
10 within scope. Also, potential TLAA's. We have added
11 plant-specific TLAA's and addressed generic safety
12 issues. Next slide.

13 There are two areas to which the staff
14 took exception in 95-10, Revision 5. These are not
15 endorsed in the Draft Guide. The first item here is
16 proposed alternative to the scoping of non-safety-
17 related piping and supports. And before I discuss
18 that, I should back up one step and discuss what is
19 included.

20 95-10 addresses safety-related systems,
21 structures and components. Non-safety-related
22 systems, structures and components are included within
23 the scope to the extent that they are connected to and
24 have an effect on the safety-related portion, and the
25 primary components that will be in this category will

1 be piping and their supports.

2 95-10 addresses the seismic analysis that
3 was performed, which will identify a seismic anchor.
4 So the first thing that will be within scope or the
5 extent of the non-safety-related portion of the piping
6 system, will be up to that identified seismic anchor.

7 Every plant has this. It's a requirement,
8 but not every plant can easily identify those seismic
9 supports. So, in that event, there is also a
10 provision to identify equivalent anchors that add a
11 degree of conservatism to the result, but also
12 guarantee that it will be within scope and not affect
13 safety.

14 The provision to which Draft Guide takes
15 exception is a proposed alternative to the above two
16 categories. What the 95-10 did was to provide an
17 alternative addressing such connections as flexible
18 connections, safety-related piping into base mounted
19 components or into the ground, or a branch connection,
20 these sorts of things.

21 The alternative does not simply identify
22 exceptions, but it raises questions in the minds of
23 the staff, and the staff doubted the applicability of
24 this alternative. What it does in the mind of the
25 staff is it complicates the application, because what

1 the staff would then like to see would be, in effect,
2 a full blown analysis justifying the selection of this
3 particular connection and then that would require, in
4 turn, a full blown staff analysis of that. So for
5 these reasons the staff took exception to this one
6 provision. Next slide.

7 The second exception is on a proposed
8 exposure duration criterion. What 95-10 proposed was
9 to allow short-term exposure to spray or leakage in
10 determining the need for aging management. Now, there
11 were other considerations that were part of this, for
12 instance the amount or type of spray or leakage
13 involved, but in effect this was a screening criterion
14 and the staff saw that this was not in compliance with
15 the regulation. And I have quoted the applicable
16 portion above, that "The effects of aging on the
17 intended function(s) will be adequately managed."

18 These two exceptions are within the Draft
19 Guide, and if anything comes forward out of the public
20 comment period that will affect the staff's thoughts
21 on this, then we will certainly consider those in
22 making the final recommendations when the Draft Guide
23 is published and final. Any questions?

24 FACILITATOR CAMERON: Okay. Thank you
25 very much, Mark. Fred?

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1 MR. EMERSON: You know, we have noted the
2 staff exceptions to NEI 95-10, Rev 5. Just to provide
3 a little bit of background, we had generated Revision
4 4, provided it to the staff. The staff provided
5 comments in late November, early December if I
6 remember correctly, and over the holidays we were
7 asked in order to support the generation of the GALL
8 Update materials by the end of January, we were asked
9 to turn around Revision 5 in pretty short order.

10 We made an effort to do that. We met with
11 the staff on January 13th, if I recall, and were
12 requested to provide 95-10, the entire new draft
13 revision, within a few days after that.

14 We made an attempt to address the issues
15 in 95-10. We understood that the exceptions that the
16 staff took were issues that needed to be addressed.
17 We took a run at it January 13th. We didn't quite get
18 there. As part of our comments to be submitted by the
19 end of March, you know, we'll take another run at it.

20 And I think we probably need a little bit
21 more discussion with staff, because we thought we had
22 done a better job of addressing your concerns than you
23 apparently thought we did when we gave you the actual
24 document. So we're going to try to make an effort to
25 achieve closure on these two exceptions as a part of

1 the comment process.

2 MR. LINTZ: Just to follow-up. As you
3 pointed out, NRC, in effect, had the document for
4 about a year. We turned it over in mid to late
5 November and then, due to guidelines or deadlines,
6 excuse me, we did impose a rather short response time
7 on you and we were glad that you were able to do what
8 you did. Thank you.

9 FACILITATOR CAMERON: Great. Other
10 comments? Let's go to Dennis Zannoni. Dennis?

11 MR. ZANNONI: Mark, could you just briefly
12 explain the differences between Rev 4 and Rev 5 just
13 in layman's terms, so we have a better understanding
14 of what the changes were, except for these two
15 exceptions, which I assume weren't in the previous
16 one.

17 MR. LINTZ: The changes, the primary
18 changes, were those identified, the three changes that
19 were identified in the previous slide and then the two
20 exceptions. Those were also changes, but then those
21 were changes to which we took exception.

22 MR. ZANNONI: Is that the standardized
23 format?

24 MR. LINTZ: Yes.

25 MR. ZANNONI: Could you elaborate a little

1 more? I mean, I'm trying to get an understanding of
2 what scoping process -- you know, that change, what
3 does that mean?

4 MR. LINTZ: The document, when it was in
5 the earlier revision, was less prescriptive, and
6 changes were identified in these areas to increase
7 standardization, to increase requirements in the
8 scoping area, to add requirements for the TLAA's. And
9 then, in the course of doing this, a major portion of
10 the effort, as you may realize, is scoping.

11 So when scoping was addressed, these other
12 two issues that are also part of scoping were
13 addressed and these are to which we took exception.
14 So it's a major area. We accepted most of the changes
15 with these two exceptions identified.

16 MR. ZANNONI: Thank you.

17 FACILITATOR CAMERON: Dennis or anybody,
18 is it clear what Mark means by scoping? I mean, do
19 you -- okay. So you're good with it? You understand
20 this now? All right.

21 MR. LINTZ: But if you haven't looked at
22 Rev 4 in the past then, you know, you're coming in
23 cold and it's hard for you to just take a look at the
24 handout you have and try to get the big picture.

25 FACILITATOR CAMERON: Okay. Other

1 comments on the Draft Guide and the NEI document?
2 Anybody want to raise anything, talk, find out more
3 about the NRC exceptions, any further information we
4 can provide? Okay. Well, thank you, Mark.

5 We are done with the substantive
6 discussions on the programs specific to the GALL and
7 the other documents. As you might remember, we
8 mentioned that we are going to have some comments on
9 general concerns, general issues on license renewal.
10 And we know specifically that we have at least two
11 County Government legislators from New York State who
12 are going to talk to us about license renewal.

13 I don't know if there is anybody else
14 that's going to have a general comment, but
15 unfortunately I'm going to try to keep talking for two
16 hours. We were scheduled to do that at 4:30. We
17 didn't realize we would be this efficient. But the
18 last word I got from the county legislators, from
19 their vehicle, they will be here sometime between 3:00
20 and 3:30 and we're not going to end the meeting until
21 we hear from those legislators, and I would encourage
22 all of you to stay around if you can.

23 But I guess the bottom line is it's about
24 2:30 and I think I'm going to suggest taking a break.
25 I don't think they are going to be here before 3:00.

1 P.T., do you want to give people a half hour to make
2 phone calls, whatever they need to do?

3 DR. KUO: That will be very helpful.

4 FACILITATOR CAMERON: Okay. Yes, Dennis,
5 because you're near New York and you have more
6 information for me?

7 MR. ZANNONI: Just a question. I assume
8 that Exelon's Oyster Creek license renewal application
9 will be the first application the NRC will review
10 under these revised documents. Is that right? Okay.
11 Thanks.

12 UNIDENTIFIED SPEAKER: That's probably
13 right.

14 FACILITATOR CAMERON: Okay. So that's
15 clear then, right? All right. And there's two
16 parking lot issues that we have. One is to find out
17 when the transcript is going to be available, so
18 people will know that, and the other is the specific
19 number of the IEEE guide. So P.T., do you want to say
20 anything about anything else?

21 DR. KUO: Yes. Let me just clarify the
22 question Dennis just asked. Kurt, you reminded me.
23 Yes, you are right that Oyster Creek may be the first
24 one to apply this GALL, the revised GALL. However, at
25 this moment it's still draft.

1 MR. ZANNONI: Still what?

2 DR. KUO: Still draft. The final version
3 of this revised GALL will be issued on September 30th.
4 So what the Oyster Creek application will use is
5 really the draft version that we issued on January
6 31st of this year.

7 FACILITATOR CAMERON: Okay. Jerry, do you
8 want to talk to the transcript?

9 MR. DOZIER: I just want to clarify that
10 even though they are using the January version, okay,
11 when the September version comes they will look and
12 see what the changes were to make sure, you know, that
13 they have addressed the final document. So it's kind
14 of a step process, but we're in this zone of, you
15 know, where we hadn't got it final, but it's probably
16 in a fairly usable format.

17 FACILITATOR CAMERON: Okay. Yes, sir?

18 MR. PATEL: Hi. This is Erich Patel. The
19 point of clarification, I guess, would be that even if
20 they used the January version, the consistency part of
21 it still goes into the 2001 version, right? It's not
22 going to be consistent with a document that is not
23 officially issued.

24 UNIDENTIFIED SPEAKER: I'm sorry? Could
25 you restate your comment?

1 MR. PATEL: Okay. If I look at the
2 application that uses January 2005 GALL information,
3 if the line item in 2005 was not in 2001, they cannot
4 say that they are consistent with GALL, right?

5 FACILITATOR CAMERON: That was a good
6 question to ask. Okay.

7 MR. COZENS: For Erich and everybody's
8 clarification, this was the subject of a meeting, was
9 it in January, a public meeting, and this is my
10 understanding of how this process will work.

11 The applicant will treat the draft January
12 2005 version as the document they compare against and
13 we'll consider whether or not they are consistent with
14 that draft document. So they will be comparing
15 consistent to the draft January 2005. However, we are
16 not able to accept that until the document is final
17 and we have final criteria for the updated GALL
18 document.

19 Therefore, there will be a reconciliation
20 process after the document is issued to assure that
21 what they say is consistent with the 2005 version is,
22 indeed, consistent with the final version and issued
23 version of the 2005 version. It goes an extra step
24 just as Jerry had said. So yes, they will be
25 comparing against the 2005 draft version.

1 FACILITATOR CAMERON: Is that clear?

2 MR. PATEL: I have a follow-up question.

3 FACILITATOR CAMERON: All right. Let's
4 get it on the record.

5 MR. PATEL: So if I am writing an
6 application, for example, and we use the general notes
7 that we normally use for consistency, A, B, C, D, E,
8 if I write my application and I have a line item that
9 is consistent with January 2005 version, but not
10 consistent with the 2001 version, do I put A, B, C, D,
11 E or do I put not consistent?

12 MR. COZENS: A, B, C, D or E.

13 MR. PATEL: Okay.

14 FACILITATOR CAMERON: Okay. Great. Okay.

15 MR. RUCKER: My name is Roger Rucker. I
16 am with Entergy. The two standards that you're
17 looking for is IEEE Standard 27, which is the standard
18 for switchgear assemblies, including the metal-
19 enclosed bus. That is also referenced as ANSI C37.20.
20 It's the same standard. The other standard is IEEE
21 C37.100, which is the standard definitions for power
22 switchgear. Okay. The first one is IEEE Standard 27.

23 UNIDENTIFIED SPEAKER: Okay.

24 MR. RUCKER: Which is the same thing as
25 ANSI Standard C37.20, and that is the standard for

1 switchgear assemblies, including metal-enclosed bus.
2 The other, IEEE C37.100, is the standard definitions
3 for power switchgear.

4 FACILITATOR CAMERON: Okay. Thank you.
5 And when we come back --

6 MR. DOZIER: There was a question about
7 when we would have the transcript.

8 FACILITATOR CAMERON: Yes. Good. Okay.

9 MR. DOZIER: There was a question about
10 when we would have the transcript and it will be
11 available in Adams and on the web by March 15th.

12 FACILITATOR CAMERON: Okay, March 15th.
13 That gives people two weeks to do their comments. Is
14 that going to be sufficient? What's that? Okay. So
15 you can delay that until March 29th. All right.
16 That's good.

17 Does anybody else have anything before we
18 take our extended break? Okay. Let's be back at 3:00
19 and we'll see where we are. Thank you.

20 (Whereupon, at 2:31 p.m. a recess until
21 4:00 p.m.)

22 FACILITATOR CAMERON: Okay. We're going
23 to come back in session now and we do have some guests
24 that have come a fairly long way to talk with us. And
25 just for some context for them in terms of what we

1 have been doing today, there has been a discussion of
2 some draft documents that the NRC uses to evaluate
3 license renewal applications and we have been
4 discussing that.

5 We have been getting some comment from not
6 only the nuclear industry, but also from David
7 Lochbaum of the Union of Concerned Scientists. We
8 will make those documents available to you today.
9 There is a transcript of the meeting, so that you can
10 see what happened during the whole day. But as I
11 think we talked about, we're always interested in
12 broader issues of concern in regard to license
13 renewal, and that is why we're glad that you came down
14 to join us today.

15 And basically, we'll have your statements
16 on the record and I'm going to turn to Frank to say a
17 few words of welcome, Frank Gillespie, but when we're
18 done with that we can proceed in whatever order that
19 you would like. It's up to you, Michael, whether you
20 want to go first or Susan. And I guess the first
21 order of business is why don't you introduce
22 yourselves to us?

23 MS. ZIMET: I'm Susan Zimet, County
24 Legislature from Ulster County, New York.

25 MR. KAPLOWITZ: Michael Kaplowitz, County

1 Legislator, Westchester County, Chair of the Budget
2 Appropriations Committee for the County Legislature
3 previously -- Environment and Health Chairman.

4 MS. BERNARD: Tara Bernard, Westchester
5 County Legislature, aide to Mr. Kaplowitz.

6 MR. SHAPIRO: Brian Shapiro, Ulster County
7 Legislature, member of the Environmental Committee in
8 Ulster County.

9 FACILITATOR CAMERON: That's great. Thank
10 you. Thank you so much for being here. And, Frank,
11 I'm going to turn it over to you.

12 MR. GILLESPIE: Yes. I would also like to
13 thank you for being here, and let me just touch upon
14 some of the normal things we do, because the renewal
15 process and the way we run it is a bit different than
16 the other processes. And that's we're pretty open.
17 Actually, we're very open in a sense that we're
18 absolutely open.

19 Everything we do is on our web page,
20 including transcripts from these meetings. We make
21 them all available and you don't have to go through to
22 get them our complex document control system if you
23 have ever tried to have a staff member try to use it
24 and search on something in Adams. P.T. and the
25 Program Group actually put them on the web page in

1 just pdf format, so everything is downloadable.

2 And again, all the documents we were
3 actually talking about today, which tended to be very
4 technically oriented, are also available there and
5 there is a place where you can just email us any
6 comments. We try to make that very easy.

7 The other thing is most of our important
8 meetings of which we consider this one, we do keep
9 transcripts. The transcripts are there and we go
10 through the transcripts after the meeting and,
11 basically, anything that is said at one of our
12 meetings carries the same weight as a written comment
13 that comes in.

14 That is why we keep the transcript and we
15 then extract those comments and, depending on the
16 forum and what the issue is, we do try to get back to
17 people and address all of the issues that were raised.
18 It's not that we address them and make everybody
19 happy, but no one generally goes without getting an
20 answer. Sometimes it takes us a little bit to get
21 back, but not years. And so that will also happen in
22 this case.

23 I think some general comments. Dave
24 Lochbaum this morning covered some general kinds of
25 comments that overall looked at reactor safety and how

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1 things work and operating experience. I understand
2 you have got some more general comments about the
3 whole system and we do welcome those, and we will then
4 get back to you.

5 This is an information gathering process
6 for us, so don't be disappointed if we're not going to
7 argue with you. It's not the means of this. We're
8 trying to be a bit measured and not be over-responsive
9 and sometimes say things that we may regret later,
10 quite honestly, and that is why taking the transcript
11 and going through it in a very measured way and
12 getting back to people is very fruitful for us.

13 So with that I would like to turn it over
14 to you and welcome you, the first group of kind of
15 local people to come down. The other thing we do when
16 we do have a licensee and an actual application, we
17 hold three meetings as a minimum and generally four in
18 the location of the site.

19 The first meeting we generally call kind
20 of the safety meeting and that's a meeting where we go
21 over all the process steps and everything that is
22 going to be done, and we do that before we send out
23 our acceptance letter of the application. And the key
24 to that is we want to make sure that the local
25 community is informed of what the process is and,

1 basically, their rights to intervene in a process
2 before the hearing clock starts.

3 There is a 60 day comment period and we
4 will generally get out the week before that comment
5 period starts to let people know where the documents
6 are, what library they are in. They are on our web
7 page and we go to the community and do that, and it's
8 so people know what's in-scope, what's out-of-scope,
9 what our standards are. So that is strictly an
10 informational meeting and we do that right up front
11 and, again, so people can then take full advantage of
12 the complete 60 day comment development period if
13 someone wants to request a hearing.

14 There are two other meetings. One is an
15 environmental scoping meeting. We do an environmental
16 impact statement and we hold what we call a scoping
17 meeting where we go out and we're actually asking the
18 community what are their socioeconomic and
19 environmental issues that they feel need to be
20 addressed within scope.

21 Now, again, there is a whole process laid
22 out and we go through all the steps. We take a
23 transcript of that meeting and we do try to get back
24 on our web page with our responses, as well, to the
25 individuals with all the issues raised. Again, not

1 that we make everybody happy, but if we're making
2 someone unhappy they know we're making them unhappy
3 and we're open and we're up front about it.

4 Then there is a draft environmental impact
5 statement meeting. Once we write up our draft
6 environmental impact statement, we come back out to
7 the community again and we say okay, take your best
8 shot at us again and then people have a document.
9 They will have had it usually for a month or so to
10 look at.

11 It tends to be fairly thick. And then we
12 accept comments on that draft and, again, they make
13 the same statement at those meetings that I made here.
14 Any comments given to us verbally in a transcript
15 carry the same weight as official written comments and
16 we address each one.

17 When we issue the final environmental
18 impact statement, there is a listing of all the
19 various comments that we have gotten and how we have
20 addressed them or not addressed them and why we
21 haven't addressed them if we haven't. So that is in
22 a thumbnail.

23 There is another meeting. We do an on-
24 site safety audit and there is an on-site safety
25 inspection connected with renewal and both of those

1 have public exit meetings in the community. And as it
2 happens, you're from around Indian Point. They are
3 not an applicant, so no one has any prejudicial
4 interest on the table right now, and so this is a good
5 time for you to get your interests kind of on the
6 table and allow us to start addressing them. With
7 that, let me turn it over.

8 MS. ZIMET: Well, in fact, I'll go after
9 you and Brian.

10 MR. KAPLOWITZ: That's fine.

11 MS. ZIMET: But I just have one quick
12 question before. You said that these meetings
13 actually happen on-site up until like --

14 MR. GILLESPIE: No, in the community not
15 on-site.

16 MS. ZIMET: Oh, I meant in the community.

17 MR. GILLESPIE: Yes.

18 MS. ZIMET: But, I mean, in other words,
19 for our particular interest, which is Indian Point,
20 you would come up to Westchester County?

21 MR. GILLESPIE: Yes.

22 MS. ZIMET: Okay. Who do you organize
23 those meetings through?

24 MR. GILLESPIE: Well, actually, Chip helps
25 us a lot as our person who knows the community groups

1 and the interest groups, and so there is usually
2 always a deliberate phone call to everyone we know who
3 has expressed an interest in every way, shape or form.
4 We put ads in newspapers. On at least one occasion,
5 at Millstone, public radio picked it up and
6 broadcasted it, in fact, recorded the whole thing at
7 each of these meetings. We usually end up contacting
8 all the local public officials. That's easier,
9 because we know who you are.

10 MS. ZIMET: Right.

11 MR. GILLESPIE: You can't hide from us.
12 And we tend to hold it in a school or a library and,
13 depending on the interest, how big a facility that
14 we'll try to arrange. We just kind of finished up our
15 last meeting at Millstone and there we used Town Hall
16 and their First Selectman, Paul Eckerd, kind of acted
17 as the introductory person and scoping out and
18 participated also in giving us some comments from the
19 community.

20 So we do deliberately try to get as much
21 advance notice out as we can and try to get as many
22 people there as we can, because if anyone has got an
23 issue, agreement, disagreement or whatever, we want it
24 on the table, so we can address it and not, quite
25 honestly, coming up at the 11th hour and so it's kind

1 of laid out in that order.

2 FACILITATOR CAMERON: And we try to
3 provide as many different types of notice to people,
4 including personal --

5 MR. GILLESPIE: Calls.

6 FACILITATOR CAMERON: -- in fact, and we
7 know some of the people who are concerned up there.
8 But if there are suggestions in terms of local cable
9 or whatever, if you have any suggestions for us along
10 the line about how to make sure we get the word out
11 there on the meeting, as well as what may be the most
12 appropriate time for the meeting, we would appreciate
13 hearing that and we'll make sure that we're in touch
14 with you.

15 MR. GILLESPIE: Yes. At least on our two
16 environmental meetings, we already plan them to have
17 an afternoon and an evening session to catch people
18 who work different shifts, have day care issues and
19 stuff. So that's kind of already built into the
20 scheme to have multiple meetings on the same day,
21 afternoon and evening.

22 MR. KAPLOWITZ: Great.

23 MR. GILLESPIE: Okay.

24 MR. KAPLOWITZ: We flipped coins and I
25 lost, so I will go first. Mike Kaplowitz, County

1 Legislator, I introduced myself before, my fourth two
2 year term. You indicated as the NRC and as
3 regulators, don't be upset if you don't argue with us.
4 As legislators, don't be upset if we don't agree with
5 you. We certainly understand, you know, the healthy
6 relationship and usually the tables are turned at
7 least in our respective legislatures where individuals
8 and regulatory agencies come to us and we have a nice,
9 very healthy debate.

10 You mentioned, sir, the word open three
11 times earlier and I appreciate and appreciate and
12 appreciate that openness, because transparency builds
13 confidence. Transparency, from our standpoint,
14 creates a standard that people can understand. It
15 creates not necessarily an outcome that everyone is
16 happy with, but an opportunity at least to participate
17 in that outcome and to feel that there is a fair shot,
18 some good faith, that allows for a process and an
19 outcome that we can have some confidence in.

20 And the Rule of Laws is obviously very
21 important, myself as an attorney, an officer of the
22 court, and a legislator and elected official. And my
23 colleagues will speak to it, as well, but certainly I
24 appreciate and thank you for the standard under which
25 we're here and the confidence that you gave.

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1 We do recognize on the sign-in sheet some
2 of colleagues. Entergy has five individuals that were
3 here today and perhaps are still here and, certainly,
4 we have spent a lot of time together with them in
5 Westchester County. I am the Chairman of the Budget
6 and Appropriations Committee, one of the two or three
7 legislators at least at the Westchester County level
8 who are interested in this particular issue.

9 I represent New Castle, Yorktown and
10 Somers directly, approximately, 55,000 people. The
11 former First Lady and current Senator and former
12 President are constituents and, certainly, we're very
13 proud to have them in Westchester County along with
14 the other 54,998 individuals.

15 I am in the shadow of Indian Point. I do
16 not represent directly the 10 mile evacuation zone,
17 but do represent the shadow zone and, of course, at
18 the county-wide level there has been a very healthy
19 debate and discussion about the place of Indian Points
20 2 and 3 in our community. And as you of course know,
21 Westchester is the host county, obviously, to the
22 Indian Point plants in Buchanan.

23 I will note in terms of the meetings
24 location, I would offer up, and the mechanics we would
25 have to work on, but there is a Westchester County

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1 Center, which is a very central location, can seat
2 from an intimate meeting up to thousands and is owned
3 by the county, and I'm sure we can make arrangements
4 that would make that available on a timely basis both
5 during the day and into the evening. It also creates
6 some geographic dispassion that allows for people of
7 all geography and of all interest in this issue to
8 come and to, again, view the transparent process and
9 to understand what exactly is going on.

10 Since September 11, 2001 the Westchester
11 Board of County Legislators has unanimously or
12 overwhelmingly passed a series of resolutions related
13 to Indian Point and while this is a workshop on
14 relicensing and my comments will mostly be to that, I
15 do want to take the opportunity once again to present,
16 and I have a series here of the Indian Point
17 resolutions that the county legislature has
18 overwhelmingly or unanimously passed regarding Indian
19 Point and, in particular, the one that I wanted to
20 draw your attention to.

21 We have sent this to the NRC, whether you
22 in particular have seen it or not I cannot assume, but
23 you will have a copy here and it passed 16 to nothing,
24 unanimous, including the legislator that represents
25 the geography of Buchanan and the home site of Indian

1 Point, that the Westchester County Board of
2 Legislators resolves that an orderly closure and
3 decommission of the Indian Point Nuclear Power Plants
4 begin at the earliest possible time. This was passed
5 September 9, 2002.

6 We further have moved on through a series
7 of resolutions. Again, I won't bore you, but you will
8 see a work product building to where we resolve. This
9 is Resolution, the last one, 269-2003, resolved that
10 the Westchester County Board of Legislators oppose the
11 relicensing of Indian Point 2 and Indian Point 3.

12 When the current licenses expire in 2013
13 and 2015 respectively, that the NRC prohibit Entergy
14 Corp's Indian Point 2 and 3 from being relicensed, to
15 make this finding as soon as possible, so that all
16 concerned and involved parties can devote their time
17 and resources to finding alternatives to the existing
18 nuclear power plants.

19 There is no question in my mind. My
20 colleagues will speak for themselves, but unanimously
21 by the county legislature and, excuse me, that one
22 actually passed 14-2 overwhelmingly at that particular
23 point. The last page, the outcome in many of our
24 points of view from a public policy standpoint is a
25 closure of Indian Point, immediate closure if

1 possible, orderly closure and timely on a relicensing
2 basis if necessary and where appropriate and possible,
3 and we do so cognizant of the energy, cognizant of the
4 jobs and cognizant of the tax, the full economic and
5 energy ramifications of the facility. We have spent,
6 gentlemen, quite a bit of time on this issue and I'm
7 certainly glad to have the opportunity to share that
8 with you today.

9 One underscore from the south and from the
10 north. You know, we were kind of joking. I guess I'm
11 the southerner in this group. Ulster County is a
12 little bit north, if you know the geography, of
13 Westchester County, so Somers is like one or two exits
14 short of Montreal if you live in the city, New York
15 City, the city, New York City. But to the Hudson
16 Valley we are on the south anchor, obviously, over
17 that.

18 But what you're seeing here is a small
19 demonstration of a great commitment. We are the
20 points of a sword, if you will. We are the vanguard
21 perhaps and many more wanted to come down and we'll be
22 meeting and greeting with you when you come up to the
23 site. It's not the most convenient time and location
24 and place and no complaints about that, but we took
25 the time out to come and you're kind enough to stay

1 and to listen to us.

2 To underscore just how critical this issue
3 is, in the 2 million population, the people that we
4 represent just in the Hudson Valley and then when you
5 factor in obviously the metropolitan New York area,
6 New York City and the surrounding two states, then
7 you're looking at as much as 8 to 10 percent of the
8 entire United States population.

9 And in the penumbra of 9/11 and what we
10 have been living under over the last few years, we are
11 not going to give up. This is a persistent issue.
12 This is one of commitment. There are many who will
13 continue to march with us on this and it is not
14 religious, it is not one of zeal and of passion as
15 much as dispassion.

16 We know that given the age of the plant
17 and we know that anything that man designs can break,
18 and we further all know based on the events perhaps
19 seared into our minds more than anybody else's of
20 9/11, New York City directly and certainly the country
21 as a whole and the neighbors that I lost in
22 Westchester and perhaps my colleagues in other
23 counties as well, we know it's a different world and
24 we know that it's not business as usual. And we know
25 that, and we'll get to the procedure in a brief

1 . moment, that this hearing, while just a workshop, is
2 critical and, again, we wanted to be here to
3 underscore that.

4 It's a two part discussion. It's the
5 substance, which I obviously gave you the last page,
6 which is we're hoping that we can all shake hands and
7 have a non-relicensing and an orderly closure. My
8 guess is there are a couple of people in this room
9 perhaps who disagree perhaps in very healthy fashion,
10 and you will professionally engage in a process to get
11 us to an outcome.

12 On the procedure, the first thing and the
13 concern is that when you had modified 10 CFR Part 2
14 Regulations last February 13th where the public had
15 the right to full on the record hearings in reactor
16 licensing proceedings where these hearings were
17 similar to federal court trials and included discovery
18 and cross examination of witnesses, that these new
19 Part 2 Regulations violate certainly what we believe
20 to be the Atomic Energy Act initial and founding
21 concerns and furthermore that eliminating the right to
22 these formal hearings in this adjudicatory proceedings
23 is wrong, is not transparent, is not consistent with
24 your comments today, sir.

25 And furthermore, if you look at Section

1 5110, purpose and scope of subpart application of
2 regulations of council under environmental quality,
3 the Commission I'm quoting recognized the continuing
4 obligation to conduct its domestic licensing and
5 related regulatory functions in a manner which is both
6 receptive to environmental concerns, consistent with
7 the Commission's responsibility as an independent
8 regulatory agency for protecting the radiologic health
9 and safety of the public.

10 We believe that the most transparent
11 process and the greatest opportunity to have an on the
12 record full hearing, we believe was that opportunity
13 and we would ask you to reemploy it or certainly, in
14 this particular case, move as close to that as very
15 possible.

16 The second part is the criteria. What is
17 very confusing to us and we don't have guidance from
18 NRC, at least we can't find it, is that the reactor
19 site criteria, Part 100 and parts beyond, is different
20 than reactor license renewal. And that we don't see
21 the coordination between the two that you would
22 normally see if you were, and I'm a tenant in a
23 building and I went through a process of getting my --
24 becoming a tenant, there was a process. And when I go
25 for my relicense, my new opportunity to stay in this

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1 particular as a tenant, in many cases this is exactly
2 the same criteria in terms of things you have to
3 provide, things you can't do and things that you must
4 do.

5 We don't see the overlap and we
6 particularly don't see, you know, and are concerned
7 for two reasons. We don't see it and we're concerned
8 because we don't know the basis under which you are
9 going to make the decision in transparent fashion that
10 is ultimately going to give confidence to people at
11 Entergy 2 and 3. Nuclear Northeast should have the
12 right and it is based on criteria that is
13 understandable, explainable and that are reasonable to
14 the public. So we need to know what that is.

15 The second part is that when we look to
16 the criteria, we're particularly concerned because
17 there is no way on using the criteria that you've set
18 out that any reasonable person would allow Indian
19 Point 2 and 3 to be built today in that location under
20 the criteria that you have set out. Specifically
21 where the criteria deals with factors and the very
22 first factor deals with population density, there is
23 no way that population, and I'm just reading, this is
24 100.20 Section, factors to be considered when
25 evaluating sites.

1 The Commission will take the following
2 factors into consideration, determining the
3 acceptability of a site for a stationary power
4 reactor: (A) is population density and use
5 characteristics of the site environment, including
6 exclusion area, population distribution, etcetera.
7 There is no more dense population in the United States
8 than the Hudson Valley, Metropolitan New York and the
9 three counties -- three states, excuse me, that
10 surround the counties. Consequently, there is no way
11 any reasonable person would allow for licensing and we
12 believe that that should be mirrored in your
13 relicensing.

14 When you go down to number 2, excuse me,
15 B under Section 100.2 factors to be considered, you're
16 dealing with the nature and proximity of man-related
17 hazards. Example, at the time given, airport stands,
18 transportation routes, etcetera. When you look at the
19 other criteria and that criteria, there is a missing
20 criteria, that's a criterium, that is not here and
21 that is terrorism. That is man-made. It is what
22 drives people to that is, of course, unknown perhaps
23 to us and understandable to us, but there are people
24 that have shown the willingness and the desire and the
25 motivation to do that.

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1 I would content, my colleagues would
2 contend that terrorism absolutely positively needs to
3 be both put into and considered on the evaluation, but
4 in this particular case, certainly the relicensing of
5 these particular plants. There is no way again with
6 20 million people within the 50 mile radius of Indian
7 Point, in fact, you would build and there is no reason
8 that, in fact, you should be able to relicense.

9 Moving on, on the substantive side, the
10 NRC should include moving parts in assessment during
11 relicensing. We're dealing with a 40 year-old plant,
12 30-some odd year-old plant. Imagine, think of your PC
13 back 30 years ago. There were no PCs 30 years ago.
14 Think of the computers and with the University of
15 Pennsylvania, the INIVAC, the first computer in 1946,
16 took up the size, literally, a whole city block in
17 Philadelphia. You turned it on and every light in
18 Philadelphia dimmed and it did four functions
19 basically.

20 We have obviously progressed quite a bit
21 and if, in fact, you had a 30 or 40 year-old car and
22 you continue to try and rig it and change it, change
23 the hoses and continue to modernize it, it becomes
24 problematic at some point. We need to move to a new
25 modality, a new operation. The moving parts

1 assessment is critical. The existing inspection
2 regime will not guarantee that those parts of a
3 plant's operation, not subject to the Aging Management
4 Review required or the license review, will function
5 safely during the extended 20 year life of the plant.

6 The NRC should require all renewal
7 applicants to submit an integrated plant assessment
8 that includes a safety review of all aspects of the
9 plant's operation, instead of a narrow assessment that
10 only examines the non-moving parts of the plant. Only
11 a comprehensive safety review coupled with an
12 aggressive inspection policy will ensure that
13 relicensed plants will operate safely during their
14 extended life span.

15 Spent fuel storage. Exempting the issue
16 of spent fuel consideration during the license renewal
17 process is also, we believe, completely unreasonable
18 given the significant safety and security issues
19 related to the storage of spent fuel and the certainty
20 that many nuclear power plants will run out of wet
21 fuel storage within the next five years. Entergy, as
22 you know, will be storing highly radioactive spent
23 fuel, that's their intention, on the grounds of the
24 Indian Point site while no definite future storage
25 plants are in place.

1 They have obviously been discussed, but
2 caught up on Macro and greater issues. It is
3 disturbing that the model system Entergy has chosen
4 for protecting its storing these casks, the Holtec
5 International HI-STORM 100 cask system has been
6 criticized by industry whistle blowers and NRC
7 officials for having manufacturing design flaws.
8 Entergy has chosen the system for list of approved
9 models. However, the NRC has not updated its list
10 since pre-9/11. It is imperative the NRC update its
11 list.

12 And concurrent with that is the issue of
13 security. I know the security lane is two rows, two
14 streets down from here, ironically. We are obviously
15 quite concerned as you are with security around the
16 Indian Point Plants and there is no, according to
17 Entergy, plans to have additional security around the
18 spent fuel beyond the perimeter and the existing
19 security that they currently have. For example, the
20 issue of even these casks and their adherence or lack
21 thereof to the pad below, the distance between the
22 number of them, the issue of how they would possibly
23 take a plane flying into them.

24 There is a Beamhenge system. There is
25 technology out there that they are not being asked to

1 employ that would create greater confidence on the
2 part of all of us that should there not be a future
3 and a distant location to transport safely the
4 material, that, in fact, for a prolonged period of
5 time on-site it can be stored and we believe that
6 given the dense population surrounding the Indian
7 Point Plants that the NRC should require Entergy not
8 to do the minimum, but instead should go the next
9 step, and in this case should look to beams and
10 bunkers and the various information.

11 When you look to Entergy's recent
12 mishandling of radioactive waste, when you look to
13 lots of outages and shortfalls and difficulties that
14 Entergy has had and by all accounts they have done a
15 better job than Power Authority and Con Ed. We're
16 glad to have them in the community versus those two.
17 But the bottom line is that the perception on the part
18 of many and you'll see from these resolutions, the
19 part of most, the part of, if not all, is that if we
20 can find a replacement to Indian Points 2 and 3 on an
21 economic basis, that cost benefit analysis is out of
22 whack, that, in fact, we need a process that will
23 recognize the dangers and allow for a non-relicensing,
24 allow for an orderly period of time, 2013 and 15 is
25 some time from now, and allow us to create a non-

1 nuclear future out at Indian Point.

2 Entergy has made five placeholders. You
3 are obviously aware of that. We understand and when
4 I took a tour through there, one of the chief
5 officers, and forgive me, I don't recall the
6 gentleman's name, indicated that they had every
7 intention of relicensing Indian Point, Indian Point 2
8 and 3. We understand that's about a two year process.
9 We are concerned that in fashion that does not allow
10 for appropriate public comment, that this will be
11 slipped in and that the process will begin with an
12 undetermined set of criteria and that the die will be
13 cast and it will be a slam dunk at that point.

14 Moving forward, that doesn't help you as
15 regulators. It doesn't provide confidence and as
16 legislators it creates a great deal of difficulty to
17 us in a world where we're not going to stop and there
18 are many behind us. You know, we don't need to come
19 to that loggerhead. If we have to, we will. But we
20 need to set up a process, I think, that will come out
21 with a different outcome.

22 One thing I would add, and I'll end with
23 this is that when the NRC very kindly came to a
24 conference center in Briar Cliff recently and
25 colleagues of yours were there, they had invited and

1 they had publicly agreed to an undetermined meeting,
2 an undetermined time and location, but reasonably
3 soon, to have a pre-meeting even before the
4 application goes in, even before the safety meeting,
5 which is before your acceptance of application, a
6 meeting before to let us all know, because we can't
7 all come down to Rockville.

8 You don't want to have us all. You'll be
9 here forever. And come up to us, get to know us. I'm
10 going out for Baltimore Crab with my friends here.
11 We'll take you to the best fair that we have locally
12 and we can work together on this. So I thank you for
13 the opportunity to say a few words and look forward to
14 hearing my colleagues speak as well. And I do
15 appreciate a healthy dialogue and discussion. I look
16 forward.

17 MR. SHAPIRO: Thank you. Again, my name
18 is Brian Shapiro, Ulster County Legislator.

19 FACILITATOR CAMERON: Can you hear? Okay.

20 MR. SHAPIRO: Thank you. Michael touched
21 a number of topics, which reflect my own sentiment.
22 There are a number of things I would like to add.
23 This is an issue that I have been concerned with going
24 on for more than a decade. As a member of the public
25 before I was a legislator and before I was elected

1 representing the town of Woodstock as a town board
2 member, I had met with Lynette Star and the New York
3 Power Authority, I believe that was in 1998, to
4 discuss the issue with Indian Point and concerns with
5 Indian Points 2 and 3, and also as a member of the
6 Woodstock Town Board, I was the author of a resolution
7 calling for the orderly shutdown and decommissioning
8 of the Indian Point Plant. And now as a legislator,
9 I'm advocating for the same concepts.

10 I would like to thank the NRC for holding
11 this workshop and allowing me the opportunity to
12 address you. I've traveled here from Ulster County,
13 New York to speak on behalf of my constituents and to
14 present the NRC with a certified copy of Resolution
15 No. 95, February 10, 2005. I'll read the title. I'll
16 give you the certified copy as opposed to taking time
17 to read the text.

18 "Supporting the Westchester County Board
19 of Legislators, Resolution No. 269-2003, calling on
20 the Nuclear Regulatory Commission to reject the
21 relicensing of Entergy Corps Indian Point 2 and 3
22 nuclear power plants located in Buchanan, New York."

23 So I'll just present you with a certified
24 copy of that. Thank you.

25 FACILITATOR CAMERON: All right.

1 Appreciate it.

2 MR. SHAPIRO: I would like to speak
3 briefly on a few issues that relate directly to
4 relicensing and also specifically to the Indian Point
5 issue, again because that's regional and that's my
6 primary concern. I think one of the major topics
7 which Michael touched on is that this plant would not
8 be located where it is now if we were to come forward,
9 if Entergy was to come forward, New York Power
10 Authority or another entity to have it constructed in
11 the most populated area in North America on the Ramapo
12 fault line.

13 This plant is an aging plant, which I
14 believe is something that has been covered under the
15 GALL Report and it does have a history of very serious
16 challenges having at one point made it onto the NRC's
17 Watch List of Nuclear Power Plants. And I need to
18 convey in the most clear language possible that I
19 believe the NRC needs to look at the situation with
20 Indian Point and relicensing in general in a post-9/11
21 context.

22 I think that in Buchanan, New York the 10
23 mile radius and even in the 50 mile radius from the
24 time when that plant was constructed, the population
25 demographics has changed. And again, in a post-9/11

1 situation, you take the 50 mile radius, which now is
2 into the area that I represent in Ulster County, and
3 we have had a shift of population into our area. Now,
4 in the worst case scenario where there is a very
5 serious incident, the term "head for the hills" is not
6 just some flippant remark. This is something where
7 you're going to have an impact on the areas that I
8 represent.

9 And I think when you take the mandated
10 hard look, this is something that needs to be looked
11 at as well. Because aside from certain environmental
12 concerns, you now have certain socioeconomic impacts
13 which would certainly affect the areas that I
14 represent. According to the Witt Report, the 10 mile
15 radius of the Evacuation Plan is questionable at best
16 in its efficiency. And I believe as part of its
17 relicensing and scoping and taking into consideration,
18 you need to look at the 50 mile radius as well for the
19 reasons that I mentioned earlier.

20 Perhaps I'm mentioning the obvious, but
21 the Indian Point Plant is not located in a rural area.
22 And I think that we need to look at that and focus on
23 the Indian Point Plant as having certain site specific
24 dynamics. And on behalf of my constituents and the
25 County of Ulster, I do have to urge the NRC to,

1 please, take my comments on relicensing, my
2 reflections on relicensing into consideration and I
3 implore you not to grant relicensing should, at some
4 point in the future, we certainly expect it, Entergy
5 to come forward and ask for permission to do so.

6 As Michael touched on, this is a very
7 serious issue in our area and it's a wide area going
8 from Westchester County straight on up into Ulster.
9 Now, if you want to take a look at the map, there is
10 a lot of people, a lot of constituents. This is a hot
11 issue and I'm sure you'll be hearing more about it.
12 And again, I thank you for allowing me to share my
13 reflections.

14 MR. GILLESPIE: Okay. Thank you.

15 MS. ZIMET: Hi. Thanks. First, I just
16 want to thank Chip Cameron, because he has been
17 incredibly gracious in terms of calling us a number of
18 times to make sure that we're set, that we know what
19 we're doing, telling us about today, making sure we
20 got down here safely, so I would just like you to know
21 what an incredibly conscientious job he did taking
22 care of us. Also, I would like to thank you for
23 allowing us to come and speak.

24 A third person from Ulster County was
25 going to come and that was the majority leader for the

1 Ulster County Legislature who I will point out happens
2 to be of an opposite political party of myself and
3 Brian. He did plan on coming today, but we actually
4 have a caucus tonight and he needed to be there. But
5 he did ask me to bring down this letter that basically
6 also attaches a copy of the resolution that was passed
7 on February 10th in Ulster County.

8 And he basically said, "As the majority
9 leader of Ulster County Legislator, I request on
10 behalf of our constituents that you take the request
11 as seriously as we do." And so, this I would just
12 like for the record on behalf of Michael Stock to hand
13 in. Also, for the record, I would like to hand in all
14 of the Government bodies that have passed relicensing
15 resolutions, so you will have that for the record.
16 Okay. I'm sorry, on the relicensing. Why don't you
17 say it.

18 MR. KAPLOWITZ: All in opposition to
19 licensing.

20 MS. ZIMET: Right. Whatever I said. I
21 don't know.

22 MR. KAPLOWITZ: For the record.

23 MS. ZIMET: Okay. Okay. I'm actually
24 going to read my statements, because I have a couple
25 of statements that other people asked me to bring down

1 on their behalf, so it's easier if I read. I also
2 have to apologize to you guys up front, because some
3 of the things I might say might be a little harsh and
4 you all seem like you are really, really very nice
5 people. So I don't mean this personally, but I think
6 I just need you to understand how we feel about this.

7 I also have to just point out that while
8 I happen to live in Ulster County, which is about 40
9 miles from Indian Point, my entire family lives by
10 Indian Point and so God forbid there should ever be an
11 accident by Indian Point, I would lose my family just
12 like that. So you know, it's a really serious issue.

13 So first of all, obviously, this issue is
14 important enough to us and our constituents that we
15 did make the trip down to Maryland today. You know,
16 we drove about four and a half hours. We'll do four
17 and a half hours back to sit here for about a half
18 hour.

19 Michael is graciously going to make us go
20 eat some crab but, you know, whether we did the eating
21 of the crab or not, we were coming down, because we
22 felt it was that important for you to understand that
23 we really take this very, very seriously and we would
24 have made a 10 hour trip to come down and speak to
25 you, so you understand that, you know, we're here and

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1 how important this is to us.

2 From my perspective, I haven't been
3 working on this issue for as long as Michael has, he
4 really has been working on it for a very, very long
5 time in his capacity as County Legislature, Brian in
6 his capacity as an individual who cares passionately
7 and as a legislator who has worked on it, I have not
8 the kind of experience and background that these two
9 have on this issue in terms of the technicalities.

10 What happened and where my involvement
11 came was, basically, Michael Kaplowitz on behalf of
12 the Westchester County Board of Legislators sent a
13 letter to surrounding counties saying would you,
14 please, consider this issue and, please, support your
15 sister county. And so we took this upon ourselves.
16 We looked at it. We studied it. We brought it to our
17 committee. It went through the proper procedures.

18 And basically what ended up happening was
19 the committee, the Public Safety Committee that looked
20 at this issue, basically said this issue is too big
21 for just a committee to address. We really want this
22 to go back to the full legislature, because this is
23 too big of an issue for us. We took it back to the
24 full legislature. Michael Kaplowitz actually came up
25 and addressed our legislature and then we proceeded to

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1 move forward.

2 What did end up happening is we actually
3 did pass a resolution supporting Westchester County's
4 request to deny the relicensing and it passed 26-6,
5 and our legislature happens to be 17 republicans and
6 16 democrats. So it's pretty split and it passed 26-
7 6. And 6 of the people who voted against it weren't
8 necessarily against it. They just didn't want to vote
9 on it right at that particular time. Okay. But you
10 know, it was pretty unanimous in the sense of people
11 feeling pretty strongly in Ulster County that we
12 wanted to support Westchester County and we think this
13 is serious.

14 As you're well-aware, the location of
15 Indian Point has to be in the single most dangerous
16 spot in the United States. Other than having it sited
17 right smack in the middle of Manhattan on 42nd Street
18 and God forbid there should really ever be an
19 accident, it might as well be located in New York
20 City. So I mean, we're talking about a really densely
21 populated place. You know, it's just not the right
22 place. We all know that.

23 One of our major concerns is the license
24 renewal process and I am probably going to duplicate
25 a lot of what Mike and Brian said, but it's so

1 important, you know, we need to say it. Siting and
2 permitting criteria for new nuclear power plants have
3 changed since Indian Point received its original
4 license. The NRC is operating under the fundamental
5 premise that every operating reactor is a viable,
6 ongoing operation that has the assumed right to keep
7 on operating.

8 This assumption is erroneous. The 40
9 years of original license is more than enough time to
10 amortize the original investment in the plant. So
11 the operation has no equitable right to continue
12 operating indefinitely. A license renewal application
13 should be reviewed under exactly the same guidelines
14 used for siting and permitting new nuclear power
15 plants. Times change. Environments change. Needs
16 change.

17 Prior to 9/11 we did not have an Office of
18 Homeland Security. Now, we do. The way the CIA and
19 the FBI do their business has changed since 9/11.
20 They had to react to a world impacted by 9/11. Why
21 should the Nuclear Regulatory Commission be exempt?
22 We can't and shouldn't ignore the fact that the
23 terrorists that attacked the World Trade Center flew
24 right by Indian Point. That's a reality we can't
25 ignore. We can't put blinders on and say that's not

1 what we're allowed to look at, so we're not going to
2 look at it.

3 I have lived in New York City for years.
4 We had gates on our windows since we lived on a ground
5 floor. After we were robbed, we got wrought iron
6 gates. We then got robbed again. We took more
7 precautions. Then we got robbed again. Well, we had
8 to adjust our life accordingly to our present
9 circumstances and we decided after a number of years
10 of living safely in our apartment without any
11 problems, we had to adjust to our new reality and we
12 had to move.

13 It's totally unacceptable to not use
14 today's licensing standards to relicense a nuclear
15 power plant. It's just unacceptable. It is
16 irresponsible and, here's where I apologize for what
17 I'm about to say but I really do mean it, God forbid
18 a terrible accident should happen at Indian Point.
19 The devastation to Westchester, New York City, Ulster
20 County would rest really on your shoulders if you
21 allow this plant to be relicensed.

22 It has been said that the Nuclear
23 Regulatory Commission, I didn't say this, but people
24 say that the Nuclear Regulatory Commission has been
25 more accountable to industry interests than to public

1 safety. By refusing to administer current siting and
2 permitting regulations and not addressing the issue of
3 public safety only feeds into the perception that you
4 are a puppet of Entergy. Please, prove them wrong.
5 We are elected officials and we are trusted with the
6 safety of the public. We're asking you to be our
7 partners in this endeavor.

8 Another issue of great importance is that
9 under the regulations, spent fuel storage is regulated
10 under separate license by the NRC not subject to
11 review during the operating and license renewal
12 process. If Indian Point is granted a 20 year license
13 extension, approximately, 2,000 additional tons of
14 high level radioactive waste will be produced and
15 remain on-site until the second national repository is
16 sited and approved.

17 How can the NRC not take into
18 consideration this buildup of toxic waste and the lack
19 of any viable off-site storage facility when reviewing
20 relicensing applications? What about the eventual
21 shipping of this product? Transporting this waste
22 product through the most densely populated region of
23 the United States is once again irresponsible.

24 To that end Ulster County passed a
25 resolution back in May of 2004 specifically addressing

1 the issue of transporting depleted uranium in a
2 responsible manner. Nine months ago, after the DOT
3 exemption expired, and I spoke with the DOT just the
4 other day, they have yet to renew this exemption,
5 because they are studying this situation, how to
6 transport depleted uranium in a safe way. So it's now
7 nine months. They have let the exemption expire and
8 they are studying this issue to figure out where do
9 they go from here.

10 We passed a resolution in Ulster County.
11 Seven other counties in New York State have passed a
12 similar resolution. Senator Chuck Schumer has started
13 talking about how are we going to transport this stuff
14 safely. The NRC has not -- I mean, not the NRC, I'm
15 sorry, the DOT has not acted on this exemption.

16 The last thing I would like to address is
17 the issue of the Emergency Evacuation Plan. For the
18 third consecutive year counties in the EPZ have
19 refused to submit their annual certification letter
20 for the Radiological Emergency Preparedness Plan for
21 Indian Point.

22 How can the NRC even contemplate extending
23 Indian Point's operating license for an additional 20
24 years when grave problems with the Emergency Plan have
25 still not been addressed? And according to James Lee

1 Witt, former head of FEMA, the plan cannot, in all
2 likelihood, be fixed to assure public health and
3 safety in a post-9/11 era.

4 Now, Brian did address the fact that after
5 9/11 a lot of people left New York City and stopped
6 feeling comfortable living there and they did move up
7 to the Hudson Valley and up where Brian and I live up
8 in Ulster Country. And to prove it, you can't touch
9 real estate in our area. Before it was a great deal,
10 you know, only a few years ago.

11 People have gotten scared. They have
12 moved out of New York City. Our area has become more
13 and more congested. We're having more and more
14 traffic problems. God forbid there should ever be an
15 emergency. It has already been stated that people
16 will not stay put. They will leave and they will head
17 for the hills, like Brian said, and we are going to
18 have a disaster on our hands. And that seriously has
19 to be looked at, because things have truly changed
20 since Indian Point was first licensed 40 years ago.

21 We're asking you to take our concerns
22 seriously. Please, understand, as Mike said, we're
23 not going away. We're going to take the success that
24 we just recently had in Ulster County and we're going
25 to work with Westchester County closely and together,

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1 and we really bonded on this trip coming down and Chip
2 heard us laughing on the phone.

3 But we're going to go around to our
4 surrounding counties and we're going to educate them
5 to what we believe is a really serious situation for
6 the Hudson Valley, and we are going to work with
7 Westchester County to make sure that our voice is
8 heard and that you take the request not to relicense
9 seriously. Once again, thank you so much for your
10 time and we appreciate it.

11 MR. GILLESPIE: Thank you. Thank you.
12 Turn my own microphone on. I appreciate you coming,
13 because actually it's -- he's coming up. We did
14 originally agree with Region I where I think the
15 request came in to. They have a meeting scheduled.
16 It was in April, I think, and it got postponed, we
17 were told, until May. And I don't know whether it's
18 good or bad being the second act for them and I'm not
19 sure when. Do we have a date in May?

20 DR. KUO: Yes, the date will be either May
21 9th or May 10th.

22 MR. KAPLOWITZ: If you could do May 10th.
23 We had specifically said May 9 was the only day we
24 couldn't do, because we have legislature.

25 MR. GILLESPIE: Okay.

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1 MR. KAPLOWITZ: An entire legislature that
2 evening.

3 MR. GILLESPIE: Yes.

4 DR. KUO: So your preference will be 10?

5 MR. KAPLOWITZ: Yes.

6 DR. KUO: Okay.

7 MR. GILLESPIE: We're kind of trying to
8 stay coordinated with the region, but on the list you
9 just gave me I'm not sure that we don't just kind of
10 need our own night. You have raised a number of
11 questions and you kept saying Indian Point and this
12 isn't bureaucratic, but Indian Point is not an
13 applicant with us.

14 MS. ZIMET: We know that.

15 MR. GILLESPIE: We do have on our
16 schedule, you will see placeholders and, I mean,
17 Entergy has indicated that each number of years they
18 are going to come in with a plant. And so I can't
19 presume. I can't make the presumption, because they
20 haven't told us what they have told you, and so there
21 is kind of a line there that I can't really cross.
22 But that doesn't change your concern and our
23 understanding of your concern.

24 MS. ZIMET: We're going to have to try to
25 give you fair warning when they do make the

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1 application.

2 MR. GILLESPIE: Yes. This is not done in
3 secrecy and timely application where our rules are
4 written, the general expectation is that they have to
5 really kind of make their decision and come in by 2008
6 and 2010. I was just subtracting five years from the
7 dates you used.

8 And so there are still several years in
9 the works when, I'm going to say, they are a resident
10 of your communities. And so there are still some
11 years of interaction that have to go on between
12 utility as a good resident and trying to be a good
13 member of the community and the community itself. So
14 I think right now Entergy has a certain obligation to
15 be continuously interfacing with you on the issues
16 that you have between each other.

17 But you have raised a number of things.
18 I will say, Dave Lochbaum this morning, it's kind of
19 a shame you weren't here, raised one of your main
20 issues, Dave, if I'm kind of allowed to tie you into
21 it, and that was exactly the issue you raised about
22 measuring renewed licenses against current safety
23 standards that we might do with some of the early site
24 permit things that we're doing right now for what
25 might be potentially a new reactor. It is not

1 currently in the rules the way the rules are set up.

2 Part 2. I guess what I would say is,
3 because I don't want to steal our thunder from coming
4 up in May and letting you get mad at -- you know,
5 instead of us having, you might say, our audience
6 here, you will have your audience there. And so what
7 you have given me, I think, and given the team here is
8 an agenda for our meeting and the agenda tends to be
9 a bit -- we're going to keep it a bit generic.

10 But I do understand your concern on Part
11 2 and that has been raised before, and I think not
12 just from the transcript, but I'm just going to kind
13 of cover my notes here and say what I got from what
14 you just said. And I'm just going in order. I was
15 just trying to go down.

16 One is the change to our hearing process
17 and I think there is an explanation to that, which I
18 think actually makes sense if we can in a calm way
19 just have the opportunity to explain it and, in
20 particular, in this program where there virtually is
21 no discovery, because we just put everything on the
22 website. We, under the old process, just didn't want
23 to get into that, and so all the correspondence
24 between us and our licensees in this whole process is
25 put on the website.

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1 And there are some issues there about what
2 happened in past hearing processes that really didn't
3 substantively introduce any new information. So we
4 may not agree, but I think we do owe you an
5 explanation of what that was, and so that would be an
6 agenda item.

7 MR. KAPLOWITZ: How do we know everything
8 is put on the website, all correspondence and all
9 conversations?

10 MR. GILLESPIE: We even put summaries of
11 phone calls on there.

12 MR. KAPLOWITZ: We have no way to know.
13 You can't prove it.

14 MR. GILLESPIE: Okay. It's a fair
15 comment. Again, I'm not going to try to -- yes, you
16 can't prove the negative. But I'm saying we're
17 willing to come up and address with your crowd why it
18 is the way it is and all I can ask is for an
19 opportunity to come up and give an explanation and
20 then have a discussion.

21 Renewal versus original licensing criteria
22 is in Part 100. There is a basic philosophy and,
23 Susan, you expressed it precisely and accurately the
24 way the rules are set up now and that's an issue you
25 have with the process. We can come up and explain the

1 logic to the process and again continue to take the
2 comments.

3 You know, it may be that we're just not
4 the only people you should be taking to and not
5 talking to, but even taking action with because, you
6 know, there is a process for petitions for rule making
7 and other things to kind of put this into a more
8 formal proceeding and we're happy to come up and
9 explain what that is.

10 MR. KAPLOWITZ: May I ask a question on
11 that?

12 MR. GILLESPIE: Yes.

13 MR. KAPLOWITZ: What percent would you say
14 then is regulatory within your purview and what
15 percent is extra-NRC/Congressional legislation or
16 other parties, because you just obviously dropped --
17 you made an interesting comment there.

18 MR. GILLESPIE: Yes, there are several
19 levels. There are several levels and within the
20 bounds of the rule, which you already don't like, so
21 I will concede you don't like the rule, within the
22 bounds of the rule generally the staff is constrained
23 in all its decisions within the boundary conditions of
24 the rule, because that was a Commission level rule
25 regulation, which they are authorized to put out under

1 the Act.

2 In addition, for the most part, lacking
3 significant new safety information, most Hearing
4 Boards are bound by the conditions of the rule. So
5 when we get to a specific proceeding, and I think if
6 you -- I'm not a lawyer, but I'm going to make
7 probably a legal statement, so I saw Ann here earlier.
8 Someone throw something at me if I say this terribly
9 wrong, because I'm going to speak in plain English,
10 that basically, and I will pick emergency planning
11 since we discussed that.

12 Emergency planning within the boundary
13 conditions of the rule are not within scope, that
14 someone can ask to have a contention admitted, but
15 because it's not within scope the Hearing Board is
16 basically held within the constraints of the rule, and
17 so it's likely not to be admitted, lacking new and
18 significant information that shows that something was
19 possibly flawed in some consideration.

20 So that's a practical aspect of just what
21 the rules are and the way they function. That
22 includes Part 2. Part 2 is a rule, so we can explain,
23 come up and explain why it is the way it is, but
24 there's other processes that then have to be employed
25 to change the rule. And so I'm --

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1 MS. ZIMET: I think Michael was
2 specifically asking you what you foresee as some of
3 the other processes.

4 MR. GILLESPIE: Oh, the other processes.
5 You know, I'm going to say now I'm getting too much
6 into the legal, so I'm going to ask Chip or someone to
7 hit me if I say this wrong.

8 The Commission has great discretion under
9 the Atomic Energy Act, quite honestly. It
10 fundamentally says that the Commission shall
11 promulgate rules and regulations as needed and it uses
12 a few more words, but not much. It's very concise in
13 its wording. And unlike legislation of the EPA and
14 other Government agencies, it's a very broad act for
15 the most part. So there is a great deal of discretion
16 that's within the rule making capability of the
17 Commission itself.

18 I do not want to make a statement as to,
19 because this would be the legal statement I'm not
20 going to make, is this entirely within or not? I
21 think I have to leave it to someone contacting our
22 general counsel to make that, but there is a broad
23 level of discretion within the Commission itself and
24 within the petition for rule making process. And so
25 there are administrative avenues, which right now have

1 not been exercised.

2 So let me go down the rest of the agenda.
3 Renewal versus Part 100 and this question that was
4 raised about -- the basic underpinnings of this rule
5 are that the current safety level is safe and,
6 therefore, its continuation is acceptable and that
7 stems into Part 100, and I think the idea of active
8 components that you mentioned also within the current
9 rules. You made the statement I think, Michael, that
10 you're not sure that the existing inspection program
11 will be acceptable in ensuring that the active
12 components are monitored.

13 Within the premise of the rule again,
14 within the way it's structured, active components are
15 covered by our Maintenance Rule, which has certain
16 requirements in it that have been deemed to be an
17 adequate Aging Management Program. But we're happy to
18 come up and discuss that issue and, as a minimum, I
19 think you have to have a clear understanding of why we
20 think it is the way it is.

21 And I think that's a matter of us trying
22 to explain the facts and it's not a matter of
23 controversy, it is this way because, and I think we
24 owe you that to come up and do that.

25 Spent fuel. You raised that. You made an

1 interesting comment, because I was actually in the
2 Waste Confidence Proceeding, oh, back in like 1995 or
3 something, and I was the one that showed the graph
4 that said do we need a second repository just because
5 of sheer capacity, and anyone can do the math. So
6 we're not talking out-of-scope.

7 You also raised that issue, which gets to
8 the role of the Waste Confidence Proceeding and what
9 the current Commission thinking might be on that.
10 It's not my specialty area. I won't say what it is or
11 isn't, but again that's an issue you have put, I
12 think, on the agenda by your presentation here.

13 I'm not going to touch, quite honestly,
14 Entergy's performance, because they are not an
15 applicant. So I'm talking about these topics in the
16 context of the rule and the structure and your
17 comments on that, and you have to make the supposition
18 of how this applies to an applicant. I can't talk
19 about an application I don't have. I'm not saying I
20 won't have it, but they haven't offered it to us yet.

21 And so this may be a very beneficial time
22 for us to come up in a slightly less, for us I hope,
23 fired up environment to at least lay out why the
24 process and system is the way it is. And then I think
25 the community has the option of taking, you know, a

1 number of actions which we can explain, but then it's
2 your option at that point.

3 So again, spent fuel mentioned several
4 times. And 9/11 was mentioned and I think 9/11 was
5 mentioned in the same context of Part 100 and
6 population density and, again, why we're not
7 considering security, which we view kind of as an
8 ongoing program. We can address it. You may not like
9 the answer, but I think it's good for us to be able to
10 come up and explain why it is the way it is. And
11 again, that gives you the option of taking further
12 actions.

13 Those were the main points that I picked
14 up. I mean, we're going to go through the transcript
15 and there's sub-points on each of these, and I look
16 forward to an active interface for him. When is it,
17 May what?

18 MS. ZIMET: May 10th I guess.

19 DR. KUO: May 10th or 9th.

20 MR. GILLESPIE: I think I'm in Florida
21 that week.

22 MS. ZIMET: Yes. If you weren't going --

23 MR. GILLESPIE: No, actually, I'm joking.
24 flyi.com had a \$44 one way fare and I actually bought
25 it about a month ago when they had this special. You

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1 had to buy it on the day they advertised it on the TV
2 here.

3 MR. KAPLOWITZ: One last comment.

4 MR. GILLESPIE: But if there's any other
5 comments, yes, because this is very helpful. It's
6 setting the agenda for our next interface and, quite
7 honestly, you have done it crisply and I don't think
8 without you coming down here I would feel right now as
9 comfortable as going up or sending P.T. up. Dr. Kuo
10 will have a good time.

11 MS. ZIMET: We'll be nice to you.

12 MR. GILLESPIE: And I think the first
13 session, I think, is an information exchange and I
14 think that it's critical to get all the facts on the
15 table and a clear understanding of why it is the way
16 it is. And we're happy to come up and do that without
17 the fire and brimstone with having a particular
18 licensee kind of in the middle of it. So we would
19 like to set some ground rules up like that. I don't
20 want to appear defensive of a licensee that I'm not
21 even reviewing.

22 MR. KAPLOWITZ: Right. The last comment.
23 I first want to thank you. It is nice to have a face
24 to see, in our case, in front.

25 MR. GILLESPIE: Yes.

1 MR. KAPLOWITZ: And to thank you for your
2 time and, hopefully, in reverse, and do welcome to
3 Westchester when you come up. The last issue. You
4 know, obviously, this is, as with us to some extent,
5 a weighing of sand. It's a scale and there are
6 certain considerations and criteria and you're going
7 to weigh them. Some places you can't go, certain
8 places you can. There is some discretion and some
9 not.

10 The Evacuation Plan, the one part if you
11 talk to the man in the street, the person, the woman
12 in the street that is perhaps the most both volatile
13 and the one that they can touch the most is that
14 issue, because at least in our part of the world and
15 probably in your part, I just did some traveling in
16 Florida and it's actually worse than New York, you
17 really have a hard time getting to the mall on a
18 Saturday. There is an awful lot of volume, an awful
19 lot of traffic and a lot of people, and the road
20 network in Westchester County is particularly
21 problematic just given the historical nature of it.

22 One of the concerns and in the seeker
23 process and in the scoping, we'll be sharing this, but
24 early on, again without a specific application in
25 there, is the inclusion of some criteria that looks to

1 the local body that is primarily responsible for the
2 evaluation planning.

3 In our case it's Westchester County,
4 Department of Emergency Services, Tony Sutton, who is
5 our Commissioner, who does a phenomenal job and who is
6 working very hard, professionally, particularly a few
7 years ago when it was a very heated environment, and
8 worked with the county executive who is going to be
9 sending comments if he hasn't already to try to
10 continue the professional level that we need in the
11 Evacuation Plan.

12 Lives are at stake potentially and this is
13 important. But then in the process of NRC and of the
14 Commission trying to determine a license on an ongoing
15 basis that there needs to be some criteria, within
16 your discretion, of the lack of confidence or
17 confidence level that the local primary Evacuation
18 Plan the entities have.

19 For example, three out of the four
20 surrounding counties have not sent in the
21 certification letter. They do not believe that, in
22 fact, you can, within a reasonable period of time
23 given a reasonable set of facts, be able to evacuate
24 a reasonable number of people. That is just their
25 professional belief. And this is not simply

1 Westchester nor Rockland in addition nor Orange in
2 addition. It's the three. And Putnam, which had a
3 healthy debate on it, the county executive I believe
4 has sent in the certification.

5 You're wiser than we are. Please, come up
6 with some process that again takes into account the
7 lack of confidence that the professionals have in our
8 community relative to evacuation planning so central
9 to, because as I understand it central to having a
10 license you have to have the ability, since Three Mile
11 Island, a reasonable opportunity to be able to
12 evacuate.

13 There is a general sense of the person, a
14 reasonable person, that that can't happen. And then
15 when the professionals further it with their own lack
16 of a seal saying that it can happen, therefore by
17 defining it can't, you're silent on and the lack of
18 confidence along with the silence creates a very
19 enervating environment that doesn't build any
20 confidence, any transparency and any faith that the
21 decision that will ultimately come is going to be a
22 fair and a reasonable one.

23 So I would ask you in these grains of sand
24 within your discretion to figure out how you weigh
25 that. And I'm not asking you to -- it's not an

1 election. It's not a plebiscite. We're not trying to
2 create anything like that, but you have to, I think,
3 take that into account, because it's real.

4 And you're going to hear from different
5 parties. I'm not the most passionate fellow on this
6 issue, believe it or not. There are crazy people out
7 there and people who are not crazy, but are very
8 passionate, because they believe that this is a threat
9 to their families. And when you put families and
10 threat in a matrix, you get a lot of people very, very
11 upset. It's a little quiet right now, but outside
12 stimulants can create some difficult times. So I
13 would just ask you to somehow --

14 MR. GILLESPIE: Okay.

15 MR. KAPLOWITZ: -- put in, within your
16 discretion, that consideration.

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E-V-E-N-I-N-G S-E-S-S-I-O-N

5:02 p.m.

MR. GILLESPIE: As I was going to say, one of the things we found with the Renewal Program and the team that Dr. Kuo has together is sometimes we're the forum that shows up, but we do listen even if we're not the forum that can fix it.

MS. ZIMET: Well, I would like to address that if that's okay. We actually, when we were coming down, did actually talk about the fact that we knew that your purview was, you know, limited in certain constraints type of stuff and we were actually talking about what other avenues do we need to be addressing to get our concerns put on the table to allow you to look at our issues.

And I just gather that Chip might be the key person to talk to to help educate us on maybe some of the other avenues we need to be exploring to start to get the possibility of putting pressure on allowing our issues to be addressed in the scope of your abilities.

FACILITATOR CAMERON: I think that --

MR. GILLESPIE: Chip is our neutral.

MS. ZIMET: Okay.

MR. GILLESPIE: I have to keep -- Chip is

1 our neutral bystander.

2 MS. ZIMET: Who is the person though? I
3 mean, I know you're going to come up.

4 MR. GILLESPIE: And we're going to be
5 talking, because I do understand the process question
6 and I don't think as an Agency we should be
7 sidestepping it. So when we come up, I can't promise
8 another office, I can only promise for the staff that
9 works for me, but I will suggest that we will, and we
10 normally do actually when we do the environmental
11 meetings, bring our general counsel with us.

12 And I think by way of explaining besides
13 what the limitations are on our scope, and we do this
14 actually at the safety meeting, this question often
15 comes up at some of our northeastern sites, what are
16 my other alternatives if you're not the right person?
17 You're telling me I have other administrative avenues
18 that I haven't exercised. What are they?

19 Now, we're not in a position of providing
20 legal advice to people, but I think we are in a
21 position of explaining what avenues our regulations
22 allow and actually provide for in a positive way, so
23 I think part of being able to come up and explain what
24 are those other avenues.

25 Believe me, I do not want to give the

1 appearance that we're dismissing your concern, because
2 it's not in the purview of our group. So I think we
3 do owe you that explanation to say, because
4 relicensing -- and I have often said this but most
5 people don't want to believe it, but I think you would
6 agree with it just from what you said.

7 The second most important document we
8 issue for a facility is its relicense and that is
9 second only to its initial license in meaning and
10 importance to both us and a facility. And so I think
11 you deserve that explanation on what the process is
12 and what are provided, which is why I'm kind of
13 looking forward to, you know, if you can help us keep
14 the context of the meeting in that.

15 And then things change, because once you
16 can understand what's in and what's out -- you, Susan,
17 already have an understanding of what's in and out,
18 because you said it. You have criticized it. But
19 what we haven't done is come up and had that first
20 meeting where we say, you know, but there are other
21 processes and here they are.

22 Now, people can say they are a bit
23 tedious. They are bureaucratic and all that, but
24 there are other processes and they are safeguards and
25 they are there and they are in place and, you know,

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1 you can criticize. They aren't exercised often, but
2 maybe they should be exercised and you should take
3 that opportunity.

4 So with that, we will be talking to
5 general counsel to try to have someone who can come
6 and also explain the other alternatives, but I do have
7 to suggest we have to stop short of doing your legal
8 work for you.

9 MS. ZIMET: No, we understand that.

10 MR. GILLESPIE: But we do need to open the
11 door and tell you where to go read it, where it is,
12 what it might mean, where you might find other
13 precedents where people have submitted things and
14 we'll do that. That's part of what I got out of --
15 which is a good part, because what I have done is kind
16 of formulated in my mind what we want to come up and
17 talk about, because I was really afraid.

18 I didn't want to get in the position of
19 defending something I didn't have and this really
20 provides some clarity, and I hope that way we're
21 prepared to come up and convey some information. And
22 then you guys, you know, the community, can take some
23 time to think about that information and then take
24 whatever appropriate action or call and say could you
25 come back and talk about something else and we'll see

1 where that leads.

2 So I do appreciate you coming down for
3 that.

4 MS. ZIMET: Thank you very much.

5 MR. GILLESPIE: Because it does help us
6 focus the meeting and I hope if I'm not on travel,
7 which I'm not sure -- I was actually available for the
8 April meeting and then they changed it. But if I am
9 here, I will be there.

10 MS. ZIMET: Great.

11 MR. GILLESPIE: And we'll see where that
12 takes us. I think we have to take it incrementally,
13 one step at a time, and fortunately we have time to
14 convey at least understanding.

15 MR. KAPLOWITZ: Thank you.

16 MR. GILLESPIE: Yes. Good.

17 MR. KAPLOWITZ: For the record, may I
18 change the word crazy or crazed to passionate?

19 MR. GILLESPIE: Passionate. Okay.

20 MR. KAPLOWITZ: I had a little more of a
21 quiet moment to contemplate.

22 MS. ZIMET: His people are passionate.
23 Brian and I or the people that Brian and I represent
24 are crazed.

25 MR. GILLESPIE: Okay. Brian, one last

1 comment before we adjourn. And I would like to say
2 that I do appreciate, because I think it's important
3 for a lot of the industry representatives to hear in
4 a dispassionate way some of the concerns of public
5 citizens and Government representatives and the local
6 environment. So the people in the audience may not
7 want to agree with me, but I think it was beneficial
8 for them to hear this dialogue and understand your
9 concerns and how we might get some understanding in
10 the community, so we at least have a factual basis.

11 MR. KAPLOWITZ: We do feel a little like
12 we were in a medical school and we were being
13 surgically proceeded on.

14 MR. GILLESPIE: Okay.

15 MR. KAPLOWITZ: I mean, having colleagues
16 watch us from above.

17 MR. GILLESPIE: Okay. Brian, you had one
18 last --

19 MR. SHAPIRO: The only other thing that I
20 would add in terms of your mentioning dialogue and
21 understanding where parties are coming from, when you
22 come to the area in Westchester County, what I would
23 ask, just in my own research, there seems to be sort
24 of this fixation on the 10 mile area, the 10 mile
25 radius.

1 What I would ask is for you folks to
2 prepare yourself in terms of having an understanding
3 of the demographics that reach, again, the 50 mile
4 radius, because it seems like Michael is here
5 representing for his constituency and his field within
6 this 10 mile radius, and I can assure you that this is
7 an issue that reaches up into Kingston.

8 Once you go past Kingston I think the
9 passion for this sort of wanes, but you definitely
10 have -- that's definitely the sphere of influence and
11 I think it would benefit the NRC to have that kind of
12 understanding and to look at it from that scope.

13 MR. GILLESPIE: I'm going to suggest that
14 before we, in this first meeting, get any -- now
15 you're getting licensee-specific. Okay? I think the
16 bigger question you have raised, is EP in or out? And
17 right now EP is out and I think we have to have a
18 clear understanding why, so that you know what avenues
19 to address to get it in.

20 And quite honestly, we'll kind of all get
21 emotional and mad at each other if we jump into a
22 specific thing when the bigger question -- you have
23 really put that bigger question on the table, so I'm
24 intending that we would come up and address the bigger
25 question first. And then if there is a need for

1 subsequent meetings, let's start from the top of the
2 pinnacle and the basic premises and then let's work
3 down.

4 If there is an issue with the basic
5 premises, we owe you an explanation of what are your
6 avenues or ways to affect those, which is, Michael,
7 what I think you asked for. And so let's start at the
8 top and work down. And I hope that you could talk to
9 your constituencies and don't raise the expectations
10 of the meeting too high. This is a first endeavor to
11 try to explain from the top down, so we're not arguing
12 the details prematurely.

13 MR. SHAPIRO: Right.

14 MR. GILLESPIE: And it's going to be an
15 important aspect and we're going to try to do that.
16 And all I can do is say we'll try to be responsive to
17 that need first and then let's see where that takes us
18 on an incremental basis, because it looks like we have
19 still got two or three years to meet together.

20 MR. SHAPIRO: I think that's fair enough.

21 MR. GILLESPIE: Okay.

22 MR. SHAPIRO: The only other thing, may we
23 be provided with a copy of today's attendance list?

24 MR. GILLESPIE: Sure.

25 MR. SHAPIRO: Thank you.

1 MR. GILLESPIE: Do we put the attendance
2 list on the website, Jerry?

3 MR. DOZIER: We'll have everything.

4 MR. GILLESPIE: On the website. So the
5 attendance list will be on the website also?

6 MR. DOZIER: I can give you a copy today.

7 MR. GILLESPIE: We'll make a copy for you,
8 so you can take it with you.

9 MR. SHAPIRO: Thank you.

10 MR. GILLESPIE: Sure.

11 MR. KAPLOWITZ: Mr. Gillespie, to your
12 last comment. Given the political milieu in New York,
13 I think we'll be seeing each other soon.

14 MR. GILLESPIE: A lot.

15 MR. KAPLOWITZ: Yes. And sooner on the
16 application.

17 MR. GILLESPIE: Yes, I think so, too. In
18 fact, before we had an application, we don't even have
19 an application for New Jersey, P.T. had a whole team
20 down with Bill Campbell and Joe Lapoti in New Jersey.
21 So we don't shy away from early interactions with
22 public officials and states even before we have an
23 application. It's very beneficial for understanding.

24 MR. KAPLOWITZ: Thank you.

25 MS. ZIMET: Michael just believes that the

1 application will probably be in a much shorter time
2 than you're expecting.

3 FACILITATOR CAMERON: Thank you. I would,
4 just on your last comment --

5 COURT REPORTER: Can you use a microphone?

6 MR. GILLESPIE: Chip's in charge of
7 tempering my overstatements.

8 FACILITATOR CAMERON: One thing you might
9 want to consider. I think that the issue of where we
10 have discretion and where it takes the change in
11 statutory authority, how you change, how we change our
12 rules, how can people petition for that is really an
13 important one, especially at this early stage.

14 I know that in the crucible of a public
15 meeting in terms of passion, I won't use the C word,
16 okay, but there is a lot of people who want to express
17 passionate thoughts, concerns, get information and
18 it's often a challenge. We do it and we will continue
19 to do it, because it's important to do that, with the
20 public as a whole to try to get the information out
21 there.

22 But one thing that you all might want to
23 consider in addition to the public meeting and, you
24 know, this is something that Frank and P.T. will have
25 to think about and you would have to think about

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1 whether this was a useful vehicle for you. We have
2 done this in the past in some cases.

3 You brought up New Jersey. That's why I'm
4 thinking about this, that maybe if there was a group
5 of legislators like you, leaders who just wanted to
6 sit down also with the staff and go through some of
7 these issues in more detail, that that would also be
8 possible. It may be a calmer environment in terms of
9 getting more information out.

10 MR. KAPLOWITZ: To that point, Chip, I had
11 referenced earlier on. We had a meeting at I think
12 it's the Edith Reed Conference Center in Briar Cliff
13 and it was NRC to Government, Government leaders. I
14 would ask that other colleagues from different
15 communities, a little wider geographical boundary, be
16 invited, but that was what I was referencing.

17 I did find that valuable. It was a little
18 bit more substantive and a little less emotional. It
19 gave us a chance to understand what's on your mind and
20 within your discretion and the like. So we're
21 certainly looking forward to having that one, but the
22 April meeting is in addition to and that's more of a
23 public forum. So thank you.

24 MS. ZIMET: And I was just going to just
25 reiterate and, actually, I was going to request

1 something like that, because the reality is it's great
2 to have a public meeting and, you know, like Michael
3 said, you know, people get passionate and whatever
4 and, you know, sometimes people don't want to hear the
5 facts. They just want to express their emotion.

6 And I think for us it's really important
7 to sit down, get the tools that we need to work with,
8 because we're going to be the ones that are going to
9 be drafting the resolutions. We're doing the work to
10 try to broaden the rules, change the rules, and so we
11 need to sit down in a very just -- you know, when
12 we're sitting down without the emotion and we're
13 sitting with our pad and pen and we, you know, take
14 notes and figure out what we can do, because then
15 we're going to be the ones doing the homework and
16 getting the work done.

17 So we absolutely need to have that and,
18 you know, whenever and wherever, we'll be there as
19 long as it's not when I'm in Florida, which is during
20 Easter break.

21 MR. GILLESPIE: I think we will take that
22 commitment up and we will say yes, time and place
23 maybe to be conveniently arranged. And Chip and P.T.
24 will kind of probably work out who the main contact
25 would be and we would be happy to do that. Yes.

1 FACILITATOR CAMERON: Okay. Thank you.
2 MR. GILLESPIE: Thank you.
3 FACILITATOR CAMERON: Thank you very much.
4 MR. KAPLOWITZ: Thank you.
5 MS. ZIMET: Thank you.
6 FACILITATOR CAMERON: Very, very good and
7 I think we're adjourned then.
8 MS. ZIMET: Thank you.
9 FACILITATOR CAMERON: We're all going to
10 Baltimore, right?
11 MR. GILLESPIE: Okay. I thank everyone
12 for their participation today. Thank you.
13 (Whereupon, the workshop was concluded at
14 5:14 p.m.)
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Updating License Renewal Guidance Documents

Jerry Dozier
Kurt Cozens
Amy Hull
Mark Lintz

Office of Nuclear Reactor Regulation (NRR)
Division of Regulatory Improvement Programs (DRIP)
License Renewal & Environmental Impacts Program
License Renewal Section B

Presented at NRC Workshop on Revised License Renewal Guidance Documents
Issued for Public Comment
March 2, 2005



Agenda and Introduction

- › Background
- › Schedule
- › Scope
- › Overview of Changes



License Renewal Guidance Documents

- › NUREG-1800, *Standard Review Plan for License Renewal Applications for Nuclear Power Plants (SRP-LR)*
- › NUREG-1801, *Generic Aging Lessons Learned (GALL) Report*
- › DG 1140, *Standard Format and Content for Applications to Renew Nuclear Power Plant Operating Licenses*

March 2, 2005

3



Background of Effort

- › Integrated participation
 - › Multi-Office within NRC
 - › Office of Nuclear Regulatory Research (RES)
 - › Office of Nuclear Reactor Regulation (NRR)
 - › Division of Regulatory Improvement Programs (DRIP)
 - › Division of Inspection Program Management (DIPM)
 - › Division of Systems Safety & Analysis (DSSA)
 - › Division of Engineering (DE)
 - › Contractors
 - › NEI
 - › Public groups
- › Multi-disciplinary teams

March 2, 2005

4



Background

- › Enhanced public participation
 - › September 30, 2004 - Preliminary draft update to GALL (AMR line-items) and SRP-LR posted on public website
 - › Frequent public meetings
- › Expanded explanations and justification
 - › Bases document providing justification for technical changes in NUREG-1800 and NUREG-1801.
 - › Public comment NUREG to be available 9/30/05

March 2, 2005

5



Schedule: Completed

Date	Accomplishment
1/31/2005	Approved draft update to GALL, SRP-LR, DG-1140 available for public comment.
2/7/2005	Draft bases document available on website.
2/1/2005 to 3/30/2005	Public comment period.

March 2, 2005

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Schedule: Looking Ahead

Date	Expectation
3/2/2005	Public workshop
3/4/2005	ACRS meeting
4/21/2005	Public meeting (tentative)
9/2005	ACRS/CRGR meetings
9/30/2005	Final publication of GALL, SRP-LR, and DG-1140 with public comment NUREG
10/30/2005	Bases Document published.

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License Renewal Guidance Update Website

- Information is available such as relevant correspondence, meeting notices, summaries, NRC public presentations, 9/30/04 and 1/31/05 posting, etc.
 - <http://www.nrc.gov/reactors/operating/licensing/renewal/guidance/updated-guidance.html>

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NUREG-1800 Schedule and Background For Guidance Update: Updated Guidance Information

The following license renewal guidance documents are currently being updated:

- NUREG-1800, Standard Review Plan for Review of License Renewal Applications for Nuclear Power Plants
- NUREG-1801, Generic Aging Lessons Learned (GALL) Report
- RG-1.182, Regulatory Guide for Standard Format and Content for Applications to Renew Nuclear Power Plant Operating Licenses

Background

This table lists, in chronological order, the notices, slides, transcripts and summaries regarding License Renewal Guidance Update:

Date	Description
02/07/05	Basis Document for Revision to: Generic Aging Lessons Learned (GALL) Report - NUREG-1801, Revision 1 and Standard Review Plan for License Renewal (SRP-LR) - NUREG-1800, Revision 1
01/31/05	NRC staff is currently soliciting comments on the following updated license renewal guidance documents: <ul style="list-style-type: none">• NUREG-1800, Standard Review Plan for Review of License Renewal Applications for Nuclear Power Plants• NUREG-1801, Generic Aging Lessons Learned (GALL) Report<ul style="list-style-type: none">◦ Volume 1◦ Volume 2• RG-1.182, Regulatory Guide for Standard Format and Content for Applications to Renew Nuclear Power Plant Operating Licenses which endorses, with exceptions, NRC-1801, Industry Guidelines for Implementing the Requirements of 10 CFR Part 54 - The License Renewal Rule

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Questions ?

March 2, 2005

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Overview of SRP-LR Update

Kurt Cozens, Senior Materials Engineer
Office of Nuclear Reactor Regulation
Division of Regulatory Improvement Programs
License Renewal & Environmental Impacts Program
License Renewal Section B

March 2, 2005



Scope of Changes to SRP-LR

- › SRP-LR changes corresponding to the update in GALL
- › Update of review process
- › Disposition of comments accumulated since issuance of the 2001 draft guidance documents

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SRP-LR Changes

- Revised Section 3.0 text
 - Division of reviews
 - Background on types of reviews
 - Expectations on extended power uprates

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SRP-LR Changes

- Revised Sections 3.1 through 3.6
 - Clarified review methodology of AMP, AMR and FSAR
 - Aligns with audit process
 - Discusses exceptions
 - Provides definition of enhancements

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SRP-LR Changes

- Revised Sections 3.1 through 3.6 (continued)
 - Further evaluation
 - Consistent with the GALL Report revisions
 - Tables updated
 - Reflects changes to the GALL Report

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NEW

NEW

Table 3.2.1 - Summary of Aging Management Programs for Engineered Safety Features
Evaluated in Chapter V of the GALL Reports

ID#	Type	Components	Aging Effect/ Mechanism	Aging Management Programs	Further Evaluation Recommended?	SRP Rule	Related Section
1a	BWR/ PWRs	Piping, piping components, and piping elements in emergency core cooling systems	Cumulative fatigue damages	TAA, evaluated in accordance with 10 CFR 54.21(c)	Yes, TAA	Yes, TAA (See subsection 3.2.2.2)	E-10 E-13 E-16
2a	BWR/ PWRs	Ducting, piping, piping components, and piping elements internal and external surfaces	Loss of material due to general corrosion	Plant specific	Yes, plant specific	Yes, plant specific (See subsection 3.2.2.2)	E-25 E-26 E-29 E-30 E-35 E-40 E-45
3a	BWR/ PWRs	Piping, piping components, and piping elements	Loss of material due to pitting and crevice corrosion	Plant specific	Yes, plant specific	Yes, plant specific (See subsection 3.2.2.2.1)	EP-32
4a	BWR/ PWRs	Piping, piping components, and piping elements internal surfaces	Loss of material due to pitting and crevice corrosion	Plant specific	Yes, plant specific	Yes, plant specific (See subsection 3.2.2.2.1)	E-33
5a	BWR/ PWRs	Partial-yielded lines with breached moisture barriers	Loss of material due to pitting and crevice corrosion	A plant specific aging management program is to be evaluated because moisture and material are present under the leak due to welding of the penetration seal from within the	Yes, plant specific	Yes, plant specific (See subsection 3.2.2.2.2)	E-01
6a	BWR/ PWRs	Piping, piping components, and piping elements in condenser cool	Loss of material due to pitting and crevice corrosion	Plant specific	Yes, plant specific	Yes, plant specific (See subsection 3.2.2.2.2)	EP-31

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Close Full Screen



Questions ?



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Overview of Changes to the GALL Report

Amy Hull

Office of Nuclear Reactor Regulation

Division of Regulatory Improvement Programs

License Renewal & Environmental Impacts Program

License Renewal Section B

March 2, 2005



Types of Revisions to NUREG-1801, Generic Aging Lessons Learned (GALL) Report

- Aging Management Program (AMP) modifications/additions/deletions
- Generalization and standardization (roll-up) of aging management review (AMR) line-items
- Primary focus on approved precedents, interim staff guidance, extensive NRC review, and lessons learned resulted in new subchapters
 - Non-Safety related 10 CFR 54.4(a)(2) SSCs
 - Common miscellaneous material environment combinations
 - External surfaces of components and miscellaneous bolting
- Comments/disposition prior to 1/31/05 draft GALL captured in electronic database
- Analysis of public comments will be captured in NUREG (similar process to creation of NUREG-1739)

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Revisions in all Sections of NUREG-1801

- Mechanical
 - Reactor Vessel Internals & Reactor Coolant System (RCS)
 - Engineered Safety Features (ESF)
 - Auxiliary System (AUX)
 - Steam & Power Conversion System (SPCS)
- Structures
 - Containment Structures
 - Structures & Component Supports
- Electrical
- New Chapter IX: Definitions
- Aging Management Programs & TLAAs

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Non-Safety Related 10 CFR 54.4(a)(2) SSCs

Structures, systems, and components (SSCs) satisfying this criteria require an aging management review in accordance with 10 CFR 54.21(a)(3). This criteria includes identification of:

- Non-safety related SSCs that are connected to safety related SSCs, and
- Non-safety related SSCs not connected to safety related SSCs but that could spatially interact with safety related SSCs.

Excerpted from GALL'05 Vol. 2

VII AUXILIARY SYSTEMS K Non-Safety Related Category (A)(2) SSCs							
Item	Link	Structure and/or Component	Material	Environment	Aging Effect/ Mechanism	Aging Management Program (AMP)	Further Evaluation
VII K-3 (AP-67)	VII K	Piping, piping components and piping elements	Stainless steel	Waste water (untreated or treated water)	Loss of material/pitting and crevice corrosion	A plant-specific aging management program is to be evaluated.	Yes, plant-specific

Excerpted from Draft Bases Document'05:

Table II.A New AMR Line Items based on new "MEAP" combinations relevant to Mechanical Systems ("A" Auxiliary, "E" Engineered Safety Features, "R" for Reactor Coolant, "S" for Steam and Power Conversion)						
Item	Structure and/or Component	Material	Environment	Aging Effect/ Mechanism	AMP	Precedent and Technical Basis for New Line-Item
RP-18	Steam Dryers	Stainless steel	Reactor coolant	Cracking/ flow-induced vibration	A plant-specific aging management program is to be evaluated	For plants performing extended power uprate, steam dryers are in scope for category (a)(2), and may exhibit cracking due to flow-induced vibration and therefore require management by a program. A plant-specific aging management program will be evaluated to provide reasonable assurance that the component's intended functions will be maintained within the CLB for the period of extended operation

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Operating Conditions Affect Integrity of SSCs

Excerpted from GALL'05:

IV REACTOR VESSEL, INTERNALS, AND REACTOR COOLANT SYSTEM B1 Reactor Vessel Internals (BWR)							
Item	Link	Structure and/or Component	Material	Environment	Aging Effect/ Mechanism	Aging Management Program (AMP)	Further Evaluation
IV B1-15 (RP-18)	IV B1	Steam Dryers	Stainless steel	Reactor coolant	Cracking/ flow-induced vibration	A plant-specific aging management program is to be evaluated.	Yes, plant-specific

Excerpted from Draft Bases Document'05:

Table II.A New AMR Line Items based on new "MEAP" combinations relevant to Mechanical Systems ("A" Auxiliary, "E" Engineered Safety Features, "R" for Reactor Coolant, "S" for Steam and Power Conversion)						
Item	Structure and/or Component	Material	Environment	Aging Effect/ Mechanism	AMP	Precedent and Technical Basis for New Line-Item
RP-18	Steam Dryers	Stainless steel	Reactor coolant	Cracking/ flow-induced vibration	A plant-specific aging management program is to be evaluated.	For plants performing extended power uprate, steam dryers are in scope for category (a)(2), and may exhibit cracking due to flow-induced vibration and therefore require management by a program. A plant-specific aging management program will be evaluated to provide reasonable assurance that the component's intended functions will be maintained within the CLB for the period of extended operation

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Careful Analysis of Bolting Line-Items in GALL'01

VII STEAM AND POWER CONVERSION SYSTEM H External Surfaces of Components and Miscellaneous Bolting							
Item	Link	Structure and/or Component	Material	Environment	Aging Effect/ Mechanism	Aging Management Program (AMP)	Further Evaluation
VII H-1 (S-32)	VII H	Bolting	Steel	Air - outdoor (External)	Loss of material/ general, pitting, and crevice corrosion	Chapter XI M18, "Bolting Integrity"	No
VII H-2 (S-40)	VII H	Bolting	Steel	Air with borated water leakage	Loss of material/ boric acid corrosion	Chapter XI M10, "Boric Acid Corrosion"	No
VII H-3 (S-03)	VII H 2-b	Closure bolting	High- strength steel	Air with steam or water leakage	Cracking/ cyclic loading, stress corrosion cracking	Chapter XI M18, "Bolting Integrity"	No
VII H-4 (S-34)	VII H	Closure bolting	Steel	Air - indoor uncontrolled (External)	Loss of material/ general, pitting, and crevice corrosion	Chapter XI M18, "Bolting Integrity"	No
VII H-5 (S-33)	VII H	Closure bolting	Steel	Air - indoor uncontrolled (External)	Loss of preload/ stress relaxation	Chapter XI M18, "Bolting Integrity"	No
VII H-6 (S-02)	VII H 2-a	Closure bolting	Steel	Air with steam or water leakage	Loss of material/ general, pitting, and crevice corrosion	Chapter XI M18, "Bolting Integrity"	No
VII H-7 (S-29)	VII H 1-b	External surfaces	Steel	Air - indoor uncontrolled (External)	Loss of material/ general corrosion	A plant-specific aging management program is to be evaluated.	Yes, plant- specific
VII H-8 (S-41)	VII H 1-b	External surfaces	Steel	Air - outdoor (External)	Loss of material/ General corrosion	A plant specific aging management program is to be evaluated.	Yes, plant- specific
VII H-9 (S-30)	VII H 1-a	External surfaces	Steel	Air with borated water leakage	Loss of material/ boric acid corrosion	Chapter XI M10, "Boric Acid Corrosion"	No

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Engineered Safety Features: '05 Revision of '01 Item

GALL 2005

V ENGINEERED SAFETY FEATURES A Containment Spray System (PWR)							
Item	Link	Structure and/or Component	Material	Environment	Aging Effect/ Mechanism	Aging Management Program (AMP)	Further Evaluation
V A-3 (E-17)	V A 6-c	Heat exchanger shell side components	Steel	Closed cycle cooling water	Loss of material/ general, pitting, and crevice corrosion	Chapter XI M21, "Closed-Cycle Cooling Water System"	No
V A-4 (E-19)	V A 6-c	Heat exchanger shell side components including tubes	Stainless steel	Closed cycle cooling water	Loss of material/ pitting and crevice corrosion	Chapter XI M21, "Closed-Cycle Cooling Water System"	No

GALL 2001

V Engineered Safety Features A. Containment Spray System (Pressurized Water Reactor)

Item	Structure and/or Component	Material	Environment	Aging Effect/ Mechanism	Aging Management Program (AMP)	Further Evaluation
A 6-c A 6-1 A 6-2 A 6-3 A 6-4	Containment spray heat exchanger (serviced by closed- cycle cooling water) Bonnet/cover Tubing Shell Case/cover	Carbon steel, stainless steel	Chemically treated borated water on tube side and closed- cycle cooling water on shell side	Loss of material/ General, pitting and crevice corrosion	Chapter XI M21, "Closed-Cycle Cooling Water System"	No

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Specification of Benign Material/ Environment Combinations

Excerpted from GALL Vol. 2

ENGINEERED SAFETY FEATURES Common Miscellaneous Material Environment Combinations							
Item	Link	Structure and/or Component	Material	Environment	Aging Effect/Mechanism	Aging Management Program (AMP)	Further Evaluation
VF-4 (EP-10)	VF.	Piping, piping components, and piping elements	Copper alloy	Air - indoor uncontrolled (External)	None	None	No
VF-5 (EP-9)	VF.	Piping, piping components, and piping elements	Copper alloy	Gas	None	None	No
VF-6 (EP-11)	VF.	Piping, piping components, and piping elements	Copper alloy	Lubricating oil (no water pooling)	None	None	No
VF-7 (EP-12)	VF.	Piping, piping components, and piping elements	Copper alloy <15% Zn	Air with borated water leakage	None	None	No

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GALL 2005 (Added Definitions)

- New Definition section (Chapter IX) provided for Materials, Environments, Aging effects/mechanisms, and selected components as relevant to different aging management Programs.
- Simplification and standardization of terms used within these MEAP combinations to make the AMR line-items more generic
 - Minimization of unnecessary detail and roll-up of similar terms
 - Temperature thresholds for certain aging effects
 - 95°F (35°C) for thermal stresses in elastomers
 - 140°F (60°C) for stress corrosion cracking (SCC) in stainless steel
 - 482°F (250°C) for thermal embrittlement in cast austenitic stainless steel (CASS)

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Chpt. IX: Standardized SSC Terms

IX.B Selected Definitions of Terms Used for Describing and Standardizing Structures, Components, Materials, Environments, Aging Effects, and Aging Mechanisms

Definition of Selected Terms for Structures and Components

Term	Definition as used in this document
Bus duct	Bus ducts are electrical buses installed on electrically insulated supports and are constructed with all phase conductors enclosed in a separate metal enclosure or a common metal enclosure.
Phase bus	Bus that is enclosed (either within its own enclosure (duct or inside a vault) that is not part of an active component such as a switchgear, load center, or motor control center)
Piping, piping components, and piping elements	This general category includes various features of the piping system that are within the scope of license renewal. Examples include piping, fittings, tubing, flow elements/indicators, demineralizer, nozzles, orifices, flex hoses, pump casing and bowl, safe ends, sight glasses, spray head, strainers, thermowells, and valve body and bonnet.
Switchyard bus	Switchyard bus is uninsulated, unenclosed, rigid electrical conductor used in switchyards and switching stations to connect two or more elements of an electrical power circuit such as active disconnect switches and passive transmission conductors.
Transmission conductors	Transmission conductors are uninsulated, stranded electrical cables used in switchyards, switching stations and transmission lines to connect two or more elements of an electrical power circuit such as active disconnect switches, power circuit breakers, and transformers and passive switchyard bus.

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Chpt. IX: Standardized Materials Terms

Excerpted from GALL Vol. 2, Table IX.C

Selected Descriptions of Materials

Standardized Expression	Description and Technical Justification
Copper alloy <15% Zn	Copper, copper nickel, brass, bronze <15% Zn, Aluminum bronze <8% Al - These materials are resistant to stress corrosion cracking, selective leaching and pitting and crevice corrosion. May be identified simply as copper alloy when these aging mechanisms are not at issue
Copper alloy >15% Zn	Copper, brass and other alloys >15% Zn, Aluminum bronze >8% Al - These materials are susceptible to stress corrosion cracking, selective leaching (except for inhibited brass) and pitting and crevice corrosion. May be identified simply as copper alloy when these aging mechanisms are not at issue
Nickel alloys	Nickel-chromium-iron (molybdenum) alloys are those such as the Alloy 600 and 690. Examples of nickel alloy designations that were earlier referenced in NUREG-1801 that comprise this category include Alloy 182, Alloy 600, Alloy 690, Gr. 688 (X-750), Inconel 182, Inconel 82, NiCrFe, SB-166, SB-167, SB-168, X-750.
Stainless steel	Wrought or forged austenitic, ferritic, martensitic, or duplex stainless steel (Cr content >11%) Examples of stainless steel designations that were earlier referenced in NUREG-1801 that comprise this category include A-286, SA193-Gr. B8, SA193-Gr. B8M, Gr. 860 (A-286), SA193-Gr. B8 or B-8M, SA453, Type 304, Type 304NG, Type 308, Type 308L, Type 309, Type 309L, Type 316, Type 317, Type 403, Type 416
Steel	For a given environment, carbon steel, alloy steel, gray cast iron, high strength low alloy steel, and cast iron are vulnerable to general, pitting, and crevice corrosion even though the rates of aging may vary. Consequently, these metal types are generally grouped for AMRs under the broad term steel. Note that this does not include stainless steel. However, gray cast iron is also susceptible to selective leaching and high strength low alloy steel is susceptible to stress corrosion cracking. Therefore, when these aging effects are being considered, these materials are specifically called out. Galvanized steel - (zinc-coated carbon steel) is also included in this category of 'steel' when there is moisture Examples of steel designations that were earlier referenced in NUREG-1801 that comprise this category include ASTM A 36, ASTM A 285, ASTM A759, SA36, SA106-GrB, SA155-Gr KCF70, SA193-Gr. B7, SA194-Gr. 7, SA302-Gr B, SA320-Gr L43 (ASi 4340), SA333-Gr6, SA336, SA508-64, class 2, SA508-CI 2 or CI 3, SA516-Gr70, SA533-Gr B, SA540-Gr B23/24, SA562

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Chpt. IX: Standardized Environment Terms

Excerpted from GALL Vol. 2, Table IX.D

Selected Descriptions of Environment	
Standardized Expression	Description and Technical Justification
Air – indoor controlled	The environment to which the specified internal or external surface of the component or structure is exposed – indoor air in a humidity controlled (e.g., air conditioned) environment
Air – indoor uncontrolled	Indoor air on systems with temperatures higher than the dew point – Condensation can occur but only rarely – equipment surfaces are normally dry
Air with borated water leakage	Air and untreated borated water leakage on indoor or outdoor systems with temperatures above or below the dew point. The water from leakage is considered to be untreated due to the potential for water contamination at the surface. This is germane to PWRs
Closed cycle cooling water	Treated water subject to the closed cycle cooling water chemistry program. Closed cycle cooling water >60°C (>140°F) allows the possibility of stainless steel SCC. Examples of environment descriptors that comprise the category include: <ul style="list-style-type: none"> Chemically treated borated water; and treated component cooling water Demineralized water on one side; closed-cycle cooling water (treated water) on the other side Chemically treated borated water on tube side and closed-cycle cooling water on shell side
Gas	Internal gas environments from air (both at atmospheric pressure in ventilation systems and compressed air used as a working fluid, (e.g. instrument air)), nitrogen, carbon dioxide, freon, and halon. This category assumes absence of corrosion species such as chlorine
Lubricating oil	Lubricating oils are low to medium viscosity hydrocarbons, with possibility of water contamination, used for bearing, gear, and engine lubrication. Piping, piping components, and piping elements (whether copper, stainless steel, or steel) when exposed to lubricating oil that does not have water pooling will not be subject to aging degradation because there are no relevant aging mechanisms
Reactor coolant	Water in the reactor coolant system and connected systems at or near full operating temperature – includes steam for BWRs

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Revisions to Time-Limited Aging Analyses: Evaluation of Aging Management Programs under 10 CFR 54.21(C)(1)(iii)

Excerpted from Bases Document:

GALL TLAA	Time Limited Aging Analyses	TLAA Revised (Y or N)	Summary of Change and its Basis	Referenced GALL '05 Chapters
XM1	Metal Fatigue of Reactor Coolant Pressure Boundary	Y	Revised the program description to note that examples of critical components are identified in NUREG/CR-6260. Revised monitoring and trending to indicate that the sample of high fatigue usage locations includes the locations identified in NUREG/CR 6260 and any additional critical components in the plant.	III, IV, V, VII, VIII
XS1	Concrete Containment Tendon Prestress	N	N/A	
XE1	Environmental Qualification (EQ) of Electrical Components	Y	Deleted reference to GSI-163 in program description. It is no longer an open issue.	VI

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Examples of Revisions to Aging Management Programs

Excerpted from Bases Document:

AMP	Summary of Change and its Basis
XI.M19 Steam Generator Tube Integrity	<p>The following changes were made:</p> <ol style="list-style-type: none">1) Eliminating reference to "staff review of NEI 97-06" & eliminating the requirement for NRC plant-specific review of a licensee's steam generator tube integrity AMP - The staff is reviewing generic revisions to the standard technical specifications, based on the provisions of NEI 97-06, which are intended to upgrade the standard technical specifications to assure the condition of the tubes remains adequate for the period of time between inspections. Also, considering that there is a framework in place, including Code of Federal Regulations, plant technical specifications, industry guidelines, and NRC oversight and review of plant's steam generator integrity activities, makes the further review of this AMP unnecessary.2) Clarifying that the AMP scope includes steam generator sleeves and plugs. This will make the AMP consistent with the line item in GALL volume 2 section IV.3) Including tube support lattice bars and tube support plates made of carbon steel in the AMP scope, and eliminating the requirement for NRC plant-specific review of the aging management program for these components - All PWR licensees have committed voluntarily to a SG degradation management program described in NEI 97-06. The staff has concluded that if the steam generator tube integrity AMP includes the carbon steel tube supports and lattice bars in the program scope, references the licensee's response to NRC GL 97-06 and the licensee's intent to maintain steam generator secondary-side integrity in accordance with NEI 97-06 guidelines, a separate plant-specific program is not needed for these programs. In addition, subsequent NRC plant-specific review of the steam generator tube integrity AMP for these components is not necessary.
XI.E5 Aging Management Program for Fuse Holders	<p>This is a new program included in January 2005 GALL version to address metallic clamp portion of fuse holders. Operating experience as discussed in NUREG-1760 (Aging Assessment of Safety-Related Fuses Used in Low- and Medium-Voltage Applications in Nuclear Power Plants) identified that aging stressors such as vibration, thermal cycling, electrical transients, mechanical stress, fatigue, corrosion, chemical contamination, or oxidation of the connections surfaces can result in fuse holder deterioration. The staff has accepted a similar program. This AMP will provide reasonable assurance that the component's intended functions will be maintained within the CLB for the period of extended operation.</p>

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Summary

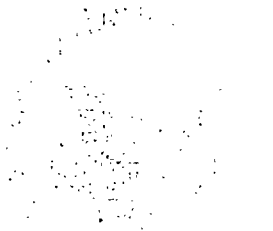
- ▶ Changes to the GALL Report and SRP-LR fall into the following general categories:
 - ▶ Standardization of MEAP parameters.
 - ▶ NRC positions previously approved in other documents.
 - ▶ Lessons learned.
 - ▶ Operating experience.
 - ▶ Technical clarifications or corrections.
 - ▶ Clarifications to the audit and review process

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Questions ?



March 2, 2005

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Overview of Draft Guide-1140

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Division of Regulatory Improvement Programs
License Renewal & Environmental Impacts Program
License Renewal Section B

March 2, 2005

March 2, 2005

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Background

- › A draft guide (DG) is a regulatory guide (RG) that is out for public comment.
- › The purpose of an RG is to provide guidance to applicants on implementing specific parts of NRC regulations.
- › The current RG applicable to license renewal is RG 1.188.

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Draft Guide-1140, Standard Format and Content for Applications to Renew Nuclear Power Plant Operating Licenses

- › Endorses, with exceptions, industry license renewal document NEI 95-10, Revision 5

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NEI 95-10, Industry Guidelines for Implementing the Requirements of 10 CFR Part 54 - The License Renewal Rule

- › Guidelines for
 - › Scope of 10 CFR Part 54
 - › Subject to Aging Management Review
 - › Maintenance of aging effects

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Changes to NEI 95-10, Revision 5

- › Standardized format
- › Scoping process
- › Potential TLAA's

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Exceptions to NEI 95-10, Revision 5

- Proposed alternative to the scoping of non-safety-related piping and supports
 - Alternative does not simply identify exceptions but adds questionable criteria.
 - Complicates the application.
 - Requires complete justification with full analysis.

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Exceptions to NEI 95-10, Revision 5, continued

- Proposed exposure duration criteria
 - Allows short term exposure to spray/leakage to determine need for aging management.
 - Not in compliance with the regulation: "The effects of aging on the intended function(s) will be adequately managed...."

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Nuclear Plant License Renewal

David Lochbaum
Nuclear Safety Engineer
March 2, 2005



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The Concerns



NRC's current license renewal process:

**Does an inadequate job of evaluating
what it looks at, and**

**Does an incomplete job by not
looking at all the places it needs to
look.**

Slide 2



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What NRC looks at



NRC's grants license renewal after determining the plant owner has an aging management program for components and structures important to safety.

Slide 3



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What NRC looks at



The aging management programs are *intended* to monitor the condition of components and structures for signs of degradation so as to cause repairs and/or replacements before safety margins are compromised.

Slide 4



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What NRC looks at



If aging management programs were adequate, there would not be many age-related failures.

After all, things are supposed to be identified and fixed before safety margins are compromised.

There are too many age-related failures.

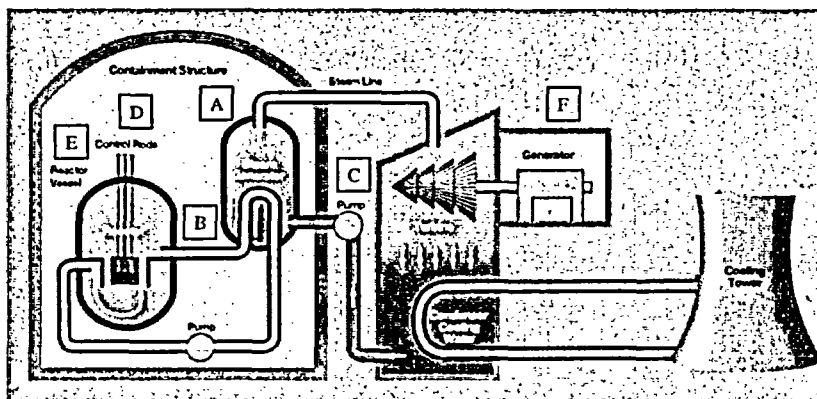
Slide 5



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What NRC looks at



A - Indian Point B - Summer C - Callaway D - Oconee E - Davis-Besse F - San Onofre

Very abridged listing

Slide 6



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What NRC looks at



Monitoring the right places with the wrong methods:

Indian Point – steam generator tube inspected in 1997, evident damage was dismissed, tube broke in February 2000

Summer – hot leg pipe weld was inspected in 1993, evident damage was overlooked, pipe leaked in October 2000

Callaway – tank lining was inspected, evident bladder damage was missed, pumps failed

Slide 7



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What NRC looks at



Monitoring the wrong places with the right methods:

Oconee – CRDM j-groove weld was inspected, but leaks occurred in another place

Davis-Besse – boric acid accumulation attributed to CRDM flange leaks, but it was also coming from CRDM nozzle leaks

San Onofre – electrical breaker inspection was deferred, it failed contributing to spring 2000 crisis in CA

Slide 8



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What NRC looks at



Aging management programs can only be effective by looking in the right places with the right methods. It takes two rights to make a right.

There are too many age-related failures to claim aging management programs are effective. There are no points awarded for trying.

Slide 9



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should also What NRC▲ look at



Aging management programs must include multiple, diverse methods for high risk components to minimize looking in the right places with wrong methods.

Aging management programs must include some out-of-scope sampling to minimize looking in the wrong places.

Slide 10



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What NRC doesn't look at



The safety requirements applicable to a specific nuclear plant are a unique array of regulations from the 60s, 70s, 80s, and 90s, along with literally hundreds of exemptions and waivers from those regulations.

The NRC does not look at those requirements compared to today's safety requirements.

Slide 11



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What NRC doesn't look at



An option to renewing the license of Plant X for 20 years would be to build a brand new nuclear plant at the Plant X site.

The new plant would have to meet today's safety regulations. But Plant X neither has to meet today's safety regulations nor make a showing of why its applicable regulations are acceptable.

Slide 12



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What NRC doesn't look at



The array of safety requirements applicable to a specific nuclear plant may, and hopefully do, provide the necessary foundation for the future.

But exemptions and waivers were granted individually. Now is the time to review the cumulated impact to verify that safety levels are still adequate.

Slide 13



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What else NRC doesn't look at



Severe Accident Mitigating Actions (SAMAs) contradict other NRC actions.

Example: NRC "resolved" USI A-43 by revising Reg Guide 1.82 to say that new nuclear plants had to calculate containment sump blockage differently. Yet NRC relicensed Calvert Cliffs, Oconee, and other PWRs without requiring the "new" calculations or determining if the old calculations were still okay.

Slide 14



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What the license renewal process should verify



That “aging” regulations applicable to a reactor provide comparable protection to today’s regulations.

That aging management programs are not just in place, but also effective.

Slide 15



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What the license renewal process should verify



If done properly, license renewal should expose people living near a site with a reactor operating for 20 years under an extended license to no greater risk than from a brand new reactor built and operated on that site.

Slide 16



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Significant Events Trending Down



Significant Events

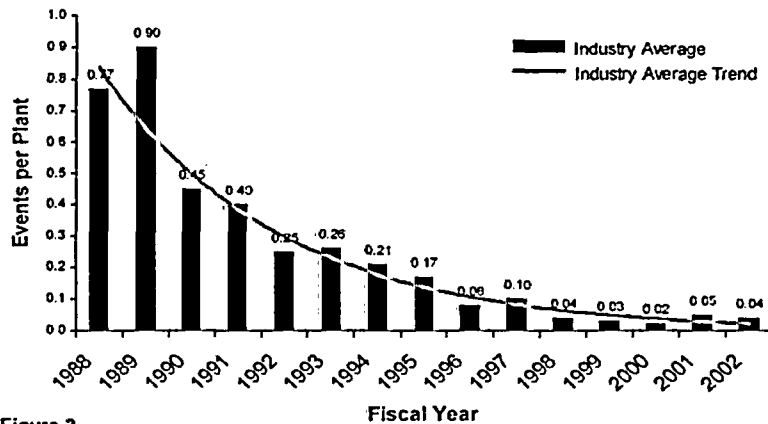


Figure 3

Slide 17



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“Kudos” for drawing Region A’s curve

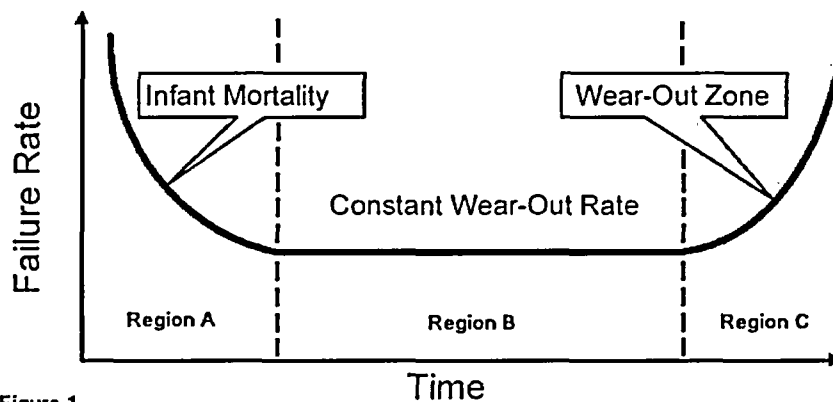


Figure 1

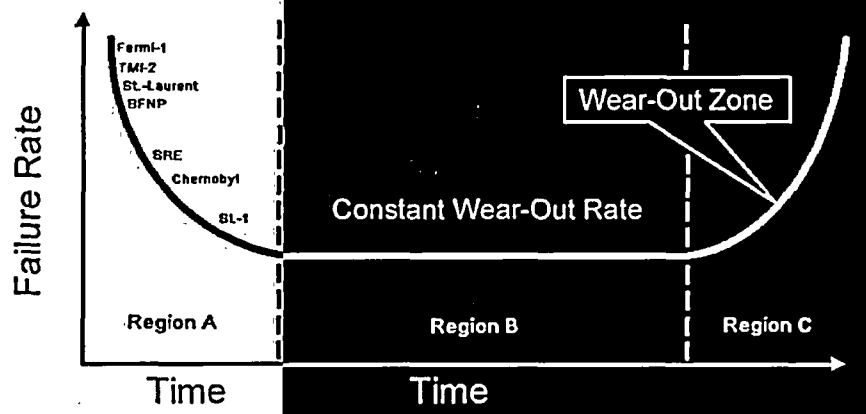
Slide 18



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Remember what happened in Region A



Nuclear plants have had major accidents in their first year or two of operation (Region A).

Slide 19



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Why the Concerns Matter

ALL of the U.S. nuclear power reactors are heading towards – if not already in – Region C.

If NRC fails to remedy the shortfalls in its license renewal process, we will start adding names of plant disasters to the wear-out portion of the curve as we've labeled the break-in portion.

Slide 20



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NRC's Accident Sequence Precursor Resembles B to C



Precursor Occurrence Rate

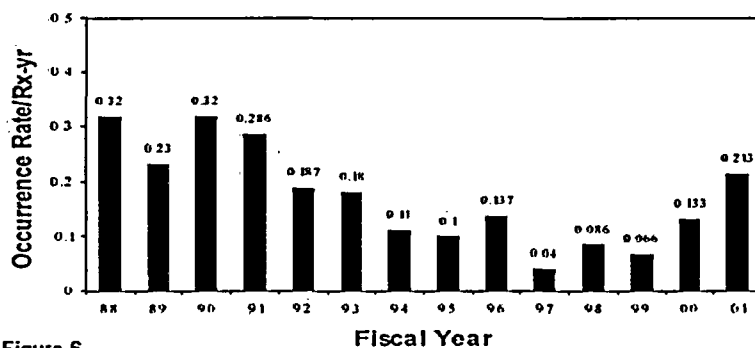


Figure 6

Slide 21

Proposed Changes to GALL

Mechanical

Proposed Changes to GALL Mechanical Discussion Areas

- Metal Fatigue Critical Components X.M1
- Aging Management Programs
- New Aging Management programs
- GALL Volume 2
- Final Format of GALL/SRP

Proposed Changes to GALL - Metal Fatigue Critical Components - X.M1

Changes to the “Program Description” and “Monitoring and Trending” elements of the AMP suggest scope of critical components goes beyond those identified in NUREG/CR-6260.

The Bases Document does not provide a technical justification for this change.

Suggest leaving the original wording.

Proposed Changes to GALL

Aging Management Programs

ISI Footnote - XI.M1 & M3 through M9: The footnote added to several AMP program descriptions acknowledges that the ASME code required under 10CFR50.55a changes periodically but it does not clearly state the applicant can credit whatever code version is applicable during the period of extended operation.

Proposed Changes to GALL

Aging Management Programs Cont'd

EPRI Water Chemistry Guidelines: The guidelines change with experience. Plant chemistry programs generally adopt new guidance. However, the GALL ties licensees to a specific edition of an EPRI Guideline and the license is forced to take an exception to the GALL AMP.

Recommend allowing the use of later editions of EPRI Guideline.

Proposed Changes to GALL

Aging Management Programs Cont'd

BWR SCC Program - XI.M7: The acceptance criteria in the BWR SCC program description was modified with the newer ASME Code edition and addenda.

Neither the new edition nor the edition originally listed in the GALL are consistent with NRC GL 88-01, which specifically lists the 1986 Edition, Subsection IWB-3600.

Suggest revising the acceptance criteria to state that detectable indication to be evaluated in accordance with commitments to GL 88-01.

Proposed Changes to GALL

Aging Management Programs Cont'd

One-Time Inspection XI.M32: Detection of the Aging Effects element of One-Time Inspections (OTI) program description was modified to add detail inspection guidance.

The OTI Program is applied to code and non-code equipment.

Code inspections are not applicable to non-code equipment.

Industry will provide a suggested revision.

Proposed Changes to GALL

New Aging Management Programs

Proposing two new aging management programs:

External Surfaces Monitoring Program performs visual monitoring of system external surfaces. The program would replace the “Plant Specific Program” currently listed in numerous line items of the GALL.

Flux Thimble Tube Inspection Program monitors loss of material of flux thimble tube walls for Westinghouse PWRs. The program would replace the aging management program elements related to GL 88-09 in GALL table IV.B2.

Proposed Changes to GALL

GALL Volume 2 Issues

Loss of Preload

- Not an aging effect requiring management for Non-Class 1 bolting
- EPRI 1003056 states loss of preload is a design effect and not an aging effect requiring management
- Stress relaxation for most CS bolting (B7) is only a concern $> 700^{\circ}\text{F}$ as stated in the ASME Code

Proposed Changes to GALL

GALL Volume 2 Issues Cont'd

External Surfaces: The introductory text to the systems in Chapters V, VII and VIII refer to the external surfaces table at end of each chapter. However many external surfaces are still within individual system tables.

Industry will provide a suggested revision, which will consolidate the external surfaces at the end of the chapter.

Proposed Changes to GALL

GALL Volume 2 Issues Cont'd

New MEAP Combinations: Industry will propose new MEAP combinations based on existing GALL lines and precedents from recently approved applications.

Proposed Changes to GALL

GALL Volume 2 Issues Cont'd

Heat Exchangers: The designation of tube side or shell side of a heat exchanger limits the applicability of the GALL line item.

Heat exchangers can be configured with cooled fluid on either the shell side or the tube side. For given set of material and environment the heat exchanger configuration will not alter the aging effects or AMPs.

Tubes to be addressed separately with regard to reduction of heat transfer.

V.A-3 (E-17)	V.A.5-a	Heat exchanger shell-side components	Steel	Closed cycle cooling water	Loss of material/ pitting and crevice corrosion	Chapter N1.M21, "Closed-Cycle Cooling Water System"	No	Priority A: The designation of the tube side or shell side of a heat exchanger unnecessarily limits the applicability of the GALL line item. Small heat exchangers can be configured with the cooled fluid on either the shell or tube side. For a given set of materials and environments, the configuration of the heat exchanger (tube side vs. shell side) will not alter the aging effects or the aging management programs.
V.A-4 (E-19)	V.A.6-c	Heat exchanger shell-side components including tubes	Stainless steel or steel with stainless steel clad	Closed cycle cooling water	Loss of material/ pitting and crevice corrosion	Chapter N1.M21, "Closed-Cycle Cooling Water System"	No	Priority A: Impact of generic comment on heat exchanger components. See basis in Line Item V.A-4 (E-19).

Proposed Changes to GALL

GALL Volume 2 Issues Cont'd

Integrate CASS with Stainless Steel: Cast austenitic stainless steel (CASS) is currently treated as a separate line item in GALL.

CASS should be treated as a subset of SS and listed separately only when embrittlement is a concern.

This will provide consistency with other parts of GALL (e.g., copper-alloy with >15% Zn and gray cast iron are separate line items when selective leaching is a concern).

Proposed Changes to GALL

GALL Volume 2 Issues Cont'd

AMP Clarification: Throughout Chapter IV the AMP column of the tables provides criteria and the criteria is unclear.

GALL Item IV.C2-4 (R-05):

Monitoring and control of primary water chemistry in accordance with the guidelines in EPRI TR-105714 (Rev. 3 or later revisions or update) minimize the potential of SCC, and material selection according to the NUREG-0313, Rev. 2 guidelines of $\leq 0.035\%$ C and $\geq 7.5\%$ ferrite reduces susceptibility to SCC.

For CASS components that do not meet either one of the above guidelines, a plant-specific aging management program is to be evaluated. The program is to include (a) adequate inspection methods to ensure detection of cracks, and (b) flaw evaluation methodology for CASS components that are susceptible to thermal aging embrittlement.

Proposed Changes to GALL

GALL Volume 2 Issues Cont'd

Component Name Rollups: The combination of some lines to produce generic lines resulted in structure/component descriptions that included all the components previously listed in the individual lines. These comprehensive lists include components that do not apply to all system/structure tables.

IV.A1-6 (R-04)	IV.A1.2-b IV.A1.4-b IV.A1.1-b IV.A1.2-a IV.A1.3-d IV.A1.6-a IV.A1.5-b IV.A1.3-a	Piping, piping components, and piping elements; flanges; heater sheaths and sleeves; penetrations; pressure housings; pump casing/cover; spray head; thermal sleeves; vessel shell heads and welds	Steel, stainless steel, cast austenitic stainless steel, carbon steel with nickel-alloy or stainless steel cladding, nickel-alloy	Reactor coolant	Cumulative fatigue damage/fatigue	Fatigue is a time-limited aging analysis (TLAA) to be performed for the period of extended operation, and, for Class 1 components, environmental effects on fatigue are to be addressed. See the Standard Review Plan, Section 4.3 "Metal Fatigue," for acceptable methods for meeting the requirements of 10 CFR 54.21(c)(1).	Yes, TLAA
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Proposed Changes to GALL

GALL Volume 2 Issues Cont'd

Nickel Alloy Open Ended Commitment: XI.M11 Nickel-Alloy Nozzles and Penetrations was deleted. In its place in the AMP column entry, is the requirement to “provide a commitment in the FSAR supplement to implement . . . (2) staff-accepted industry guidelines.”

From Line Item IV.A2-8 (R-75)

Chapter XI.M1, “ASME Section XI In-service Inspection, Subsections IWB, IWC, and IWD,” for Class 1 components and Chapter XI.M2, “Water Chemistry,” for PWR primary water in EPRI TR-105714 and, for Alloy 600, provide a commitment in the FSAR supplement to implement applicable (1) NRC Orders, Bulletins and Generic Letters associated with nickel alloys and (2) **staff-accepted industry guidelines.**

Proposed Changes to GALL

Final Format of GALL/SRP

Industry would like to know what the final version format will use with respect to line numbers.

- Will the generic alpha-numeric (R-04) identifiers still be used in the rollup tables in Volume 1?
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R-03	IV.C1-1
R-04	IVA1-6
	IV.A2-19
	IV.C1-11
	IV.C2-15
	IV.D1-5
	IV.D2-3

Proposed Changes to GALL

Mechanical

Proposed Changes to GALL Mechanical Discussion Areas

- Metal Fatigue Critical Components X.M1
- Aging Management Programs
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- GALL Volume 2
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Proposed Changes to GALL

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	IV.D2-2
R-02	IV.C2-1
R-03	IV.C1-1
R-04	IVA1-6
	IV.A2-19
	IV.C1-11
	IV.C2-15
	IV.D1-5
	IV.D2-3

Proposed Changes to GALL Civil/Structural

Summary of CSWG Proposed Changes to GALL

1. Corrections to GALL
2. Consolidation of GALL Sections IIIA
and IIIB

CSWG Proposed Changes to GALL

1. Corrections to GALL (Example 1 of 4)

- Throughout Chapter III the AMP should be “Structures Monitoring Program” and not “ASME Section XI, Subsection IWL”.
- Incorrect aging mechanism listed under the AMP Section for the aging mechanism specified.

CSWG Proposed Changes to GALL

1. Corrections to GALL (Example 2 of 4)
 - GALL in Section III A6 (Water-Control Structures) does not differentiate for accessible and inaccessible areas. (Not consistent with other concrete structure sections)

CSWG Proposed Changes to GALL

1. Corrections to GALL (Example 3 of 4)

- The combination of some lines to produce generic lines resulted in structure/component descriptions that included all the structural components previously listed in the individual lines.
 - Not all of these components apply to all system/structure tables
- GALL lists the incorrect structure components for the Section specified.

CSWG Proposed Changes to GALL

II.B2.1-4 (C-19)	II.B2.1.1-a	<p>Steel elements:</p> <p>Drywell; torus; drywell head; embedded shell and sand-pocket regions; drywell support skirt; torus ring girder; downcomers; EGCS ejection header</p> <p><i>Drywell; suppression chamber; drywell head; embedded shell and sand pocket regions; support skirt; downcomer pipes; region shielded by diaphragm floor</i></p> <p>NOTE: Inspection of containment supports is addressed by ASME Section XI, Subsection IWF (see III.B1.3)</p>	Steel	Air – indoor uncontrolled <i>or treated water</i>	Loss of material/ general, pitting, and crevice corrosion	<p>Chapter XI.S1, "ASME Section XI, Subsection IWE"</p> <p>For inaccessible areas (embedded containment steel shell or liner), loss of material due to corrosion is not significant if the following conditions are satisfied:</p> <p>Concrete meeting the specifications of ACI 318 or 349 and the guidance of 201.2R was used for the containment concrete in contact with the embedded containment shell or liner. The concrete is monitored to ensure that it is free of penetrating cracks that provide a path for water seepage to the surface of the containment shell or liner. The moisture barrier, at the junction where the shell or liner becomes embedded, is subject to aging management activities in accordance with IWE requirements. Borated water spills and water ponding on the containment concrete floor are not common and when detected are cleaned up in a timely manner.</p> <p>If any of the above conditions cannot be satisfied, then a plant-specific aging management program for corrosion is necessary.</p> <p>Chapter XI.S4, "10 CFR Part 50, Appendix J" and</p> <p>If a coatings program is credited for managing loss of material due to corrosion during the current licensing term (e.g., relief request from IWE), then</p>	Yes, if corrosion is significant for inaccessible areas
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CSWG Proposed Changes to GALL

1. Corrections to GALL (Example 4 of 4)

- GALL gives an aging effect/mechanism and an Aging Management Program for galvanized steel and aluminum in an Air – indoor uncontrolled environment.
- Previous SERs have accepted no aging effects for this combination.

CSWG Proposed Changes to GALL

2. Consolidation of GALL Sections IIIA and IIIB
(Simplification to eliminate duplication and provide for a more efficient review.)
 - How It Has Been Accomplished:
 - Created two Matrices (One for Section IIIA and other for IIIB) to identify repeat items (See the Matrix)

CSWG Proposed Changes to GALL

GALL SECTION III A (CLASS I AND CLASS II STRUCTURES) COMMON ITEM MATRIX									
Section	A1	A2	A3	A4	A5	A6	A7	A8	A9
	BWR Rx, PWR Shld	BWR Rx w/stl Struc	Aux, DG, etc	Cont Int Struc	FS Facility	WC Struc	Conc Tank	Steel Tank	Vent Stack
T-01	X (A1.1-a)	X (A2.1-a)	X (A3.1-a)		X (A5.1-a)		X (A7.1-a)	X (A8.1-a)	X (A9.1-a)
T-02	X (A1.1-b)	X (A2.1-b)	X (A3.1-b)		X (A5.1-b)		X (A7.1-b)	X (A8.1-b)	X (A9.1-b)
T-03	X (A1.1-c)	X (A2.1-c)	X (A3.1-c)	X (A4.1-b)	X (A5.1-c)		X (A7.1-c)	X (A8.1-c)	X (A9.1-c)
T-04	X (A1.1-d)	X (A2.1-d)	X (A3.1-d)	X (A4.1-d)	X (A5.1-d)		X (A7.1-d)		X (A9.1-d)
T-05	X (A1.1-e)	X (A2.1-e)	X (A3.1-e)		X (A5.1-e)		X (A7.1-e)	X (A8.1-d)	X (A9.1-e)
T-06	X (A1.1-f)	X (A2.1-f)	X (A3.1-f)	X (A4.1-a)	X (A5.1-f)		X (A7.1-f)		X (A9.1-f)
T-07	X (A1.1-g)	X (A2.1-g)	X (A3.1-g)		X (A5.1-g)		X (A7.1-g)	X (A8.1-e)	X (A9.1-g)
T-08	X (A1.1-h)	X (A2.1-h)	X (A3.1-h)		X (A5.1-h)	X (A6.1-f)	X (A7.1-h)	X (A8.1-f)	X (A9.1-h)
T-09	X (A1.1-i)	X (A2.1-i)	X (A3.1-i)		X (A5.1-i)	X (A6.1-g)	X (A7.1-i)	X (A8.1-g)	X (A9.1-i)
T-10	X (A1.1-j)	X (A2.1-j)	X (A3.1-j)	X (A4.1-c)	X (A5.1-j)				
T-11	X (A1.2-a)	X (A2.2-a)	X (A3.2-a)	X (A4.2-a)	X (A5.2-a)		X (A7.2-a)	X (A8.2-a)	
T-12	X (A1.3-a)	X (A2.3-a)	X (A3.3-a)		X (A5.3-a)	X (A6.2-a)			
T-13				X (A4.2-b)					
T-14					X (A5.2-b)				
T-15						X (A6.1-a)			
T-16						X (A6.1-b)			
T-17						X (A6.1-c)			
T-18						X (A6.1-d)			
T-19						X (A6.1-e)			
T-20						X (A6.1-h)			
T-21						X (A6.2-a)			
T-22						X (A6.4-a)			
T-23							X (A7.2-b)	X (A8.2-b)	

Building Structures and Vent	A1+A2+A3+A4+A5+A9
Water Control Structures	A6
Tanks	A7+A8

CSWG Proposed Changes to GALL

GALL SECTION III B (COMPONENT SUPPORTS) COMMON ITEM MATRIX							
Section	B1 (ASME PIPING & COMP)			B2	B3	B4	B5
	B1.1	B1.2	B1.3	CT, Cond,	Anchorage	DG, Mech Equip	Platforms,
	Class 1	Class 2 & 3	Class MC	HVAC	Racks, Cabinet	HVAC Equip	PWR, Masonry
T-24	X	X	X				
T-25	X	X		X	X	X	X
T-26	X	X	X				
T-27	X						
T-28	X	X	X				
T-29	X	X	X	X	X	X	X
T-30				X	X	X	X
T-31						X	
TP-1				X		X	
TP-2				X		X	
TP-3	X	X	X	X	X	X	X
TP-4	X	X	X	X	X	X	X
TP-5	X	X	X	X	X	X	X
TP-6				X		X	
TP-7							
TP-8	X	X	X	X	X	X	X

ASME Piping & Components	B1.1+B1.2+B1.3
Non-ASME Piping & Structural Supports	B2+B3+B4+B5

CSWG Proposed Changes to GALL

2. Consolidation of GALL Sections IIIA and IIIB

- Summary:
 - 93 Items in Section III.A Consolidates to 36 Items
 - 52 Items in Section III.B Consolidates to 20 items
 - Total 145 Item consolidates to 56 Items
 - 117 Page document transforms to 47 page document

Proposed Changes to GALL Electrical

Proposed Changes to GALL Electrical

- New Programs
 - XI.E4 Bus Duct
 - XI.E5 Fuse Holders
 - XI.E6 Electrical Cable Connections
- New Line Items
 - High-Voltage Insulators
 - Switchyard Bus and Connectors
 - Transmission Conductors
- Inconsistent AMP Element

Proposed Changes to GALL Electrical

- XI.E4 Bus Duct
 - “Metal-Enclosed Bus” is the proper industry designation to use for AMP per ANSI/IEEE Standards
 - Eliminate retorquing of bolted connections as not recommended by vendors or bolting practices
 - White paper and revised AMP description will be provided

Proposed Changes to GALL Electrical

- XI.E5 Fuse Holders
 - The AMP and GALL line item LP-01 should be revised to clearly state that if the stressors that result in fatigue of fuse clips are not present, no AMP is needed.
 - Boric acid program manages corrosion due to leakage
 - a(2) evaluation covers water leakage

Proposed Changes to GALL Electrical

- XI.E6 Electrical Cable Connections Program
 - No past precedents or ISG
 - No OE to show significant failure frequency
 - EPRI 1003471, Electrical Connection Application Guidelines, concludes not an aging issue

Proposed Changes to GALL Electrical

- No Plant-Specific AMPs should be required for:
 - High-Voltage Insulators – External deposits are temporary or events, not aging – insulator material not degraded
 - Switchyard Bus and Connectors – Materials chosen for long-term compatibility with the outdoor environment
 - Transmission Conductors – Proven 80 year lifetimes
- SERs for prior LRAs confirm there are no aging effects requiring management
- These proposed new line items can be expected to result in numerous exceptions to GALL

Proposed Changes to GALL Electrical

- 10 CFR 50, Appendix B should be credited for “Corrective Actions” without specific, prescriptive AMP engineering evaluation details for all electrical AMPs
- Recommend using standard words from Corrective Action element in Mechanical AMPs



**NRC Workshop on Revised License Renewal
Guidance Documents Issued for Public Meeting
Wednesday, March 2, 2005
ATTENDANCE LIST**

Name (Print)	Organization (if any)
DAVID LOCHBAUM	Union of Concerned Scientists
DAVID WOOTEN	DOMINION RESOURCES -
ROGER STEWART	PROGRESS ENERGY
FRED POLASKI	EXPLOR
STEVEN SCHELLIN	NMC - POINT BEACH
Roger Rucker	Entergy Nuclear, Inc.
Alan Cox	ENTERGY NUCLEAR
JACQUE LINGENFELTER	ENTERGY NUCLEAR
REZA AHRABIE	ENTERGY NUCLEAR, INC.
GARRY G. YOUNG	ENTERGY NUCLEAR
PATRICK B. BURKE	NMC
BRIAN WOHlers	NMC
BOB KALINOWSKI	AMERICAN ELECTRIC POWER - COOK
SUSAN Zimet	Ulster County Legislature
Michael Kaplowitz	Westchester County Legislature, NY
TARA BERNARD	"
STEVEN SHAPIRO	ULSTER COUNTY LEGISLATURE
Jeff Dozier	NRC
Melissa Verland	NRC



**NRC Workshop on Revised License Renewal
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ATTENDANCE LIST**

Name (Print)	Organization (if any)
Deann Raley	LIS Sciencetech
Deann Zair	New Jersey
Layelana Santos	NRC
Allison Black	NRC
Chang Li	NRC
Thammasak Ryan	ITAPZC
Robert King	NRC
Marko Bonner	AERS
M. Srinivasan	USNRC, RES
Juan Ayala	NRC
Dan Nau	ORNL
Steve West	NRC/NRA/RLEP
Amy Hull	NRC/NRR/RLEP
Barry Elliot	NRC/NRR/OE/EMCB
GREG CRANSTON	NRC/NRR/DRIP/RLEP
PETER WEN	NRC/NRR/RLEP
OT KUO	NRC/NRR/RLEP
David Teng	NRC/NRR/EMCB
Carolyn Lough	NRC



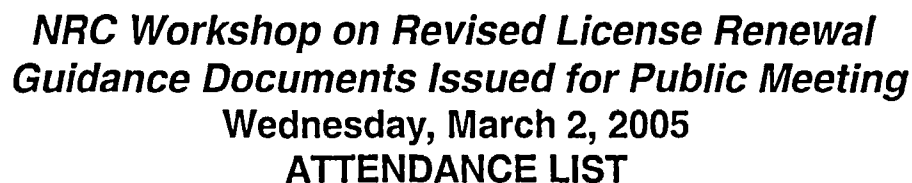
**NRC Workshop on Revised License Renewal
Guidance Documents Issued for Public Meeting
Wednesday, March 2, 2005
ATTENDANCE LIST**

Name (Print)	Organization (if any)
DANIEL MERZKE	NRC
Johnny Eads	NRC/NRR/DRIP/RLRP
John Bowen	WPI
MASSOUD TAEAZZOLI	ARIEVA
JOHN GDDO	PPL SUSQUEHANNA
Michael B. Detamore	PPL Susquehanna
SAMSON LEE	NRC/NRR/RLRP
DARREL TURNER	NUCLEAR MGMT CO. - PALISADES
TOOS ANSEMI	WOLF CREEK NUCLEAR OPERATING CORP.
Paul Crawley	Arizona Public Service - Palo Verde ; STARS
Eric Blocher	Parsons Energy & Chemicals ; STARS
Jonathan Rowley	NRC/NRR/RLRP
Kimberley Ford	NRC/NRR/DRIP/RLRP-A
Kaihua ^U HSU	NRC/NRR/DRIP/RLRP-B
Michael Waterman	NRC/RES/DET/ERAS
KATHRYN M SUTTON	MORAN, LEWIS & BOCKIUS LLP



**NRC Workshop on Revised License Renewal
Guidance Documents Issued for Public Meeting
Wednesday, March 2, 2005
ATTENDANCE LIST**

Name (Print)	Organization (if any)
Mark Lintz	NRC
Mike Macfarlane	Southern Nuclear
PARTHA GHOSAL	Southern Nuclear
FRED EMERSON	NEI
Tom Green	Southern Nuclear
CHALMER MYER	Southern Nuclear
Steve Hoffman	NRC
Jake Zimmerman	NRC
Ram Subbaratnam	NRC.
NAEEM IQBAL	NRR/DSSA/SPCB
Aida Rivera-Varona	NRR/DIPM/IPSB
Zahira Cruz Perez	NRR
Paul Gencora	NEI
Tamela Terry	NRC
Kamalakar NAIDU	NRR.

[illegible]



WESTCHESTER COUNTY BOARD OF LEGISLATORS

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Legislator, 4th District
26 Lalli Drive
Katonah, New York 10536

March 2, 2005

Chairman
Budget & Appropriations Committee
Member
Committee on
the Environment
Committee on
Public Safety and Criminal Justice

Statement to the U.S. Nuclear Regulatory Commission

*Public Workshop on Revised Guidelines for Nuclear Power Plant License
Renewal Applications (Rockville, Maryland)*

Good afternoon. My name is Michael Kaplowitz. I am a Westchester County Legislator and chairman of the Board's Budget & Appropriations Committee. Thank you for the opportunity to say a few words at this hearing.

As you know, Westchester is the host County to the Indian Point Nuclear Power Plants in Buchanan, which are owned and operated by Entergy, Corp.

Since September 11, 2001, the Westchester County Board of Legislators has unanimously or overwhelmingly passed a series of Resolutions relative to Indian Point (IP2 and IP3), covering various topics ranging from increased security, to closure and decommissioning, to the replacement of energy, jobs and taxes, to our most recent Resolution, No. 269-2003, which calls on you, the Nuclear Regulatory Commission, to deny any petition to relicense IP2 and IP3.

I would like to take this opportunity to highlight some of the key concerns associated with relicensing IP2 and IP3 for an additional 20 years beyond their current license expiration dates of 2013 and 2015, respectively.

Procedure:

Until the NRC modified its 10 C.F.R. Part 2 regulations last Feb. 13th, the public had the right to full, on-the-record hearings in all reactor licensing proceedings. These hearings were similar to federal court trials, and included discovery and cross-examination of witnesses. These new "Part 2" regulations violate the Atomic Energy Act by eliminating the right to these formal hearings in most agency adjudicatory proceedings.

Criteria:

Nuclear Power Plant owners first applying for an operating license at the Indian Point site today would not likely receive one from the NRC under its current

standards and regulations; 10 C.F.R. Subpart B ss100.20, which would prohibit the siting of a nuclear power plant in a densely populated area. Over 20 million people live within a 50-mile radius of the Indian Point Nuclear Power Plants.

Entergy Corp. has secured several placeholders with the NRC for relicensing applications. Common sense dictates that the same criteria should be required for license renewals as is required for licensing new plants. This would prohibit the relicensing of the Indian Point Nuclear Power Plants and enable the necessary parties to come together to address the issues of alternative energy sources, taxes and jobs, and plan for a non-nuclear future at the Indian Point site.

Further, the NRC should include "Moving Parts" in its assessment during relicensing inspection. The NRC's existing inspection regime will not guarantee that those parts of a plant's operation not subject to the aging management review required for license renewal will function safely during the extended twenty-year life of the plant. The NRC should require all renewal applicants to submit an Integrated Plant Assessment that includes a safety review of all aspects of the plant's operation, instead of a narrow assessment that only examines the 'non-moving parts' of the plant. Only a comprehensive safety review, coupled with an aggressive inspection policy, will ensure that relicensed plants will operate safely during their extended life span.

Terrorism:

The threat of terrorism is an unfortunate reality in a post 9/11 world. Given the fact that the Indian Point site is just 33 miles from NYC, and is located in such a densely populated area, highlights the fact that a terrorist attack at the Indian Point Nuclear Power Plants would be catastrophic – both short and long term.

President Bush, in a State of the Union Address, stated that maps of US nuclear power plants were found in Al Qaeda caves. One of the planes that crashed into the World Trade Center flew right over the Indian Point site. According to the 9/11 Commission's report, an Al Qaeda terrorist admitted that a NY area nuclear power plant was indeed one of their targets. All these facts considered, relicensing the Indian Point Plants would be relicensing a terrorist target.

Population Increase:

Indian Point is a prime example of a plant sited in an area that has undergone tremendous population growth and development over the last thirty years. The population living and working near Indian Point has dramatically increased since the original operating licenses were granted. This increase in population density must be taken into consideration during the license renewal process. Roads and bridges cannot handle the amount of traffic leaving the 10-mile radius and beyond.

According to Urbanomic's adjusted forecast of population in the New York Metro Region (prepared for the NY Metropolitan Planning Council), the population in the Mid-Hudson Valley alone will jump from 2.2 million to almost 2.5 million by 2025, thereby making a reasonable evacuation plan virtually impossible.

Spent Fuel Storage:

Exempting the issue of spent fuel storage from consideration during the license renewal process is completely unreasonable, given the significant safety and security issues related to the storage of spent fuel and the certainty that many nuclear power plants will run out of wet fuel storage space within the next five years.

Entergy will be storing highly radioactive spent fuel on the grounds of the Indian Point site, while no definite future storage plans are in place. It is disturbing that the model/system Entergy has chosen for protecting and storing these casks, Holtec International's HI-STORM 100 Cask System, has been criticized by industry whistleblowers and NRC officials for having manufacturing and design flaws as well as serious concerns with their quality assurance program and is not the highest quality system available. Entergy has chosen this system from a list of "NRC approved models". However, the NRC has not updated its list since pre-9/11. It is imperative that the NRC update its list of approved dry cask systems to include a high quality, robust storage system that has been designed (post-9/11) to contain and isolate radiation and repel terrorist attacks.

In addition, due to the dense population surrounding the Indian Point Plants, the NRC should require Entergy to employ structural security measures around the casks – such as aboveground bunkers, beamhenge, or containment structures. The NRC should require these issues to be addressed in the EIS process of its relicensing regulations.

Aging Equipment:

William Lemanski, a recently retired software manager for Entergy at IP 2, wrote a letter to the NRC expressing his concerns about cable separation problems at the plant. These serious concerns, potentially indicative of much more extensive problems regarding improperly sorted electrical cables at the plant, prompted Senator Clinton along with Congress members Lowey, Hinchey, Engel and Kelly to call on the NRC to commence an in depth investigation into this issue.

In 1975, a fire at one of the Browns Ferry nuclear reactors in Alabama burned cables from both primary and backup systems, nearly triggering a meltdown. It was this incident that resulted in new NRC regulations, requiring nuclear power plants to separate certain cables by distance or fire barriers. Now, 30 years later, residents in the NY Metro area are still endangered from the lack of compliance with these regulations. These concerns are similar to an industry-wide problem so serious, it impelled the Maine Yankee Plant to close in 1997.

Further, the Indian Point Nuclear Power Plants have long been criticized by friends and foes alike for their excessive shutdowns. In December 2003, an NRC official stated that Indian Point had three times as many unplanned shutdowns in a 12-month period as any other plant in the nation. This same official noted that according to a report released that same month, that failure to follow protocol, insufficient quality control and poor contractor oversight contributed to these shutdowns.

Entergy's recent mishandling of radioactive waste from its Indian Point reactor site caused a leak of irradiated material at the Barnwell Waste Management Facility where the waste was transported for storage. According to the NRC at least one worker was exposed to radioactive materials which is not only alarming but is in violation of South Carolina laws regulating the handling of nuclear waste at the Barnwell facility.

While Entergy promotes itself in New York as a corporation concerned about low-income communities and communities of color, it ships its low-level waste to Barnwell - a low income, rural, nearly 50% African-American community where a hundred-acre radioactive plume migrated from the waste dump to the single source aquifer for the community. If they can't safely ship waste to an offsite location, how can anyone believe that they can safely store radioactive waste onsite?

In conclusion, I ask that you deny any applications for the license renewal of the Indian Point Nuclear Power Plants, and send a clear message to Entergy Corp., local governments and all relevant parties, that the time is now to start planning for a non-nuclear future at the Indian Point site.

Thank you.

RESOLUTION No. 269 – 2003

Whereas, Entergy Corp., owner and operator of the Indian Point Nuclear Power Plants, has expressed its intent to apply for operating license extensions of 20 years for IP2 and IP3, and being that the Westchester County Board of Legislators has previously expressed its concern over the continued operation of the nuclear power plants at the Indian Point Energy Center through several resolutions passed by this Honorable Board, including Resolution No. 142-2002 which calls on officials from the Federal, State and Local governments to work with relevant parties to develop a plan that includes the below listed action steps, namely:

1. the development of an alternative, uninterrupted, and affordable energy source to replace the power currently produced at Indian Point,
2. the development of a financial plan that will mitigate the negative real estate tax implications on the local communities, school district, and county government,
3. the development of a plan to positively consider the current employees, such consideration will include job placement, retraining of affected workers, and other employment strategies, and
4. the development of a plan that ensures that spent fuel rods will be immediately secured and properly protected on site from the threat of a terrorist attack or accident, and

that an orderly closure and decommissioning of the Indian Point Nuclear Power Plants begin at the earliest possible time, and

Whereas, this Honorable Board reiterates its resolve, based on the potential of a terror attack on the plants, a concern about the age of the plants, and the potential results of a failure of equipment or human error in the operations of the plants, and

Whereas, Indian Point 2 and 3 were initially licensed based on Nuclear Regulatory Commission (NRC) regulations promulgated over 30 years ago, and if plant owners were to apply for a license to operate a nuclear power plant at the Indian Point site today, it would not likely be granted by the NRC under its current standards and regulations, specifically prohibiting the siting of nuclear power plants based on population density considerations, now therefore be it,

Resolved, that the Westchester County Board of Legislators opposes the re-licensing of Indian Point 2 and Indian Point 3 when their current licenses expire in 2013 and 2015, respectively, and that the NRC prohibit Entergy Corp.'s Indian Point 2 and 3 from being re-licensed, and to make this finding as soon as possible so that all concerned and involved parties can devote their time and resources to finding alternatives to the existing nuclear power plants, and be it further

Resolved, that the NRC should modify, through its GEIS process, its siting regulations to reflect current considerations including that of terrorism, and be it further

Resolved, that the Clerk of the Board of Legislators forward the text of this resolution to Westchester County's State and Federal delegation, to all legislative bodies and elected officials within the 50-mile zone surrounding the Indian Point Nuclear Power Plants, the Nuclear Regulatory Commission and Entergy Corp., so that the intent of this Honorable Board be widely known.

Passed (as amended) by the Board of Legislators, 14-2, on November 24, 2003



**WESTCHESTER COUNTY
BOARD OF LEGISLATORS**

Series of Indian Point Resolutions

*Honorable Michael B. Kaplowitz
Chairman, Committee on Budget & Appropriations*

March 2005

RESOLUTION 10 -2003 (As Amended)

WHEREAS, among its duties and responsibilities, the Westchester County Board of Legislators is charged with overseeing and guaranteeing the public health and safety of those who live and/or work within Westchester County, and

WHEREAS, consistent with this charge, this Honorable Board, through its Committees on Public Safety and Criminal Justice and on Environment and Health, has, for the past three years, been monitoring the County's Emergency Evacuation Plan that would be put into effect in the event of a radiological incident at the Indian Point Nuclear Power Plant, and

WHEREAS, as a result of serious questions raised regarding this Plan the two aforementioned Committees did urge that an independent, non-governmental assessment be made of the ability of Plan to achieve its goals of protecting public health and ensuring public safety, and

WHEREAS, under contract with the State of New York such an assessment has been made and the findings released by James Lee Witt Associates, LLC and

WHEREAS, these findings have pointed to deep deficiencies in the Plan, many of which had already been noted by your Honorable Board's aforementioned Committees, and

WHEREAS, these deficiencies have, in turn, called into question the ability of the Plan to achieve the goals of protecting public health and ensuring public safety, and

WHEREAS, acting on the recommendation of its two aforementioned Committees, this Honorable Board has determined that these deficiencies must, as a matter of the public good, be addressed and remedied with the greatest possible speed, and

WHEREAS, by Charter, this Honorable Board is responsible for setting the policies that are to be carried out by the County of Westchester, especially, but not limited to, those that protect public health and ensure public safety, NOW THEREFORE BE IT

RESOLVED, that this Honorable Board does reaffirm with utmost urgency its call made through Resolution No. 265 - 2001 that security at the Indian Point Nuclear Power Plants be placed under the control of the United States military and that this be done without further delay, and be it further

RESOLVED, that as a matter of policy, this Honorable Board does hereby direct the County Executive or any other official and/or employee of the County of Westchester not to issue a radiological emergency preparedness activities form or any other official communication that would in any way state or imply that the Emergency Evacuation Plan as it currently exists is capable of achieving its goals of protecting public health and ensuring public safety in the event of a radiological incident, and be it further

RESOLVED, that, should such communication be mandated by a higher authority, this Honorable Board does hereby direct, as a matter of policy, that it shall not be issued without an accompanying disclaimer that the Emergency Evacuation Plan as it currently exists should not be construed as capable of achieving its goals of protecting public health and ensuring public safety, and be it further

RESOLVED, that this Honorable Board, as a matter of policy, does hereby direct that the County Executive immediately begin to incorporate the germane recommendations of the Witt Report into the Emergency Evacuation Plan and that he report back to this Honorable Board no later than 120 days following the passage of this Resolution on the progress that has been made with respect to this directive, and be it further

RESOLVED, that this Honorable Board does hereby call upon the State and Federal Governments to immediately begin to implement those recommendations of the Witt Report relevant to their respective responsibilities in and for the Emergency Evacuation Plan, and be it further

RESOLVED, that this Honorable Board does hereby call upon the Nuclear Regulatory Commission to immediately shutdown the Indian Point Nuclear Power Plants and provide for proper safeguarding of all of the fuel rods by removal or safe storage until such time as it can be demonstrated that the Emergency Evacuation Plan can achieve its goals of protecting public health and ensuring public safety, and be it further

RESOLVED, that this Honorable Board does hereby affirm anew its wishes that the Indian Point Nuclear Power Plants be decommissioned at the earliest possible date in accordance with the guidelines specified in Resolution No. 142 - 2002, and be it further

RESOLVED, that this Honorable Board does hereby direct that its will and its desire as expressed through the Resolution here passed be transmitted to all parties appropriate within the County, State and Federal Governments empowered to act upon and effect the provisions as stated herein.

Dated: January 13, 2003
White Plains, NY

COMMITTEE ON PUBLIC SAFETY
AND CRIMINAL JUSTICE

COMMITTEE ON ENVIRONMENT
AND HEALTH

Passed by full Board – January 21, 2003

RESOLUTION 142 - 2002

Whereas, residents of Westchester County and other citizens have voiced their concern about the safety of the Indian Point Nuclear Power Plants, particularly since the events of September 11, 2001, and

Whereas, concern has been raised about the potential results of a terror attack on the plants, or the potential results of a failure of equipment or human error in the operations of the plants, in such a densely populated region of the country, now therefore be it

Resolved, that officials from the Federal, State and Local governments working with relevant parties develop a plan that includes the below listed action steps, namely:

- 1. the development of an alternative, uninterrupted, and affordable energy source to replace the power currently produced at Indian Point,**
- 2. the development of a financial plan that will mitigate the negative real estate tax implications on the local communities, school district, and county government,**
- 3. the development of a plan to positively consider the current employees, such consideration will include job placement, retraining of affected workers, and other employment strategies, and**
- 4. the development of a plan that ensures that spent fuel rods will be immediately secured and properly protected on site from the threat of a terrorist attack or accident, and be it further**

Resolved, that an orderly closure and decommissioning of the Indian Point Nuclear Power Plants begin at the earliest possible time, and be it further

Resolved, that this Resolution be transmitted to the Governor of the State of New York and all of Westchester's Federal and State representatives so that they may know the will and intent of this Honorable Board.

**Dated: *September 9, 2002*
White Plains, New York**

Passed by the Board of Legislators by a 16-0 vote

RESOLUTION 006 - 2002

WHEREAS, the concerns and safety of its residents is of the utmost importance to the Westchester County Board of Legislators, and

WHEREAS, the board recognizes that there are questions regarding the count of committed customers in Westchester County for the gas that would be distributed by the Millennium Gas Pipeline, and

WHEREAS, the County Board of Legislators recognizes substantial opposition to the Millennium Pipeline, and

WHEREAS, New York State is currently undertaking an energy needs analysis, so therefore be it

RESOLVED, that the Columbia Gas Transmission Corporation consider immediately amending their application to the Federal Energy Regulatory Commission (FERC) for the Millennium Pipeline, and alter their route by proposing that the 420-mile Millennium Pipeline, currently intended to travel throughout Westchester County and terminate in the City of Mt. Vernon, be reconfigured to end at the Bowline Facility in Rockland County, and be it further

RESOLVED, that the Public Service Commission should support such alteration of the Millennium plan, and be it further

RESOLVED, that a long term resolution to the region's energy needs using methods that are efficient, as well as community and environmentally sensitive, be sought with the participation of Westchester County as part of the New York State Energy Planning, and be it further

RESOLVED, that a study be conducted of the potential of utilizing the terminus at Bowline to provide additional natural gas into the Algonquin Pipeline to allow for the potential conversion of Indian Point from nuclear to natural gas, and be it further

RESOLVED, that this Honorable Board directs its clerk to transmit a copy of this resolution to the Columbia Gas Transmission Corporation, the Entergy Corporation, the Governor of the State of New York and all State and Federal Officials, so that the content and intent of this resolution be widely known.

Dated: _____, 2002

Committee on

Resolution No. 266-2001

WHEREAS, in light of recent events and in this age of terrorism, the spectre of Indian Point being damaged by terrorists is too horrible to comprehend, and

WHEREAS, Entergy recently bought Indian Point II and III and the decommissioned Indian Point I nuclear power plants located in Buchanan, New York, and

WHEREAS, Entergy states its commitment to safely producing electric energy for this region with significant accompanying economic benefits of jobs created and taxes paid, and

WHEREAS, approximately five percent of the nation's population lives within fifty miles of Indian Point and would be at risk from a large-scale incident, and

WHEREAS, there is a natural gas line that presently feeds into the facilities and that Entergy is planning to build a separate finishing plant that would use natural gas, and understanding there are large resources of natural gas in North America, now, therefore, be it

RESOLVED that the Westchester County Board of Legislators calls on Entergy, the New York State Public Service Commission and all other relevant parties to immediately begin a detailed feasibility study on converting Indian Points II and III from nuclear energy to natural gas or other non-nuclear fuel, and

RESOLVED that while the potential cost of conversion is expensive, it is an expense that in the interest of safety and sanity must be made given the potential danger to life and property, and be it further

RESOLVED, this resolution be transmitted to our entire Federal and State delegation.

Dated *October 23*, 2001
White Plains, New York

Tim B. King
Ursula G. LaMotte

RESOLUTION 265 -2001

WHEREAS, in light of recent events and our present and increasingly growing concern with Indian Point II and Indian Point III nuclear power plants as potential targets of terrorism, and

WHEREAS, an attack on the Indian Point nuclear facility could be devastating to all area Westchester residents as well as to the approximately five percent of the nation's population living within fifty miles of Indian Point who would be at risk from a large-scale incident, and

WHEREAS, we recognize that the debate on the long term future of Indian Point will take place but we are now most concerned about the immediate protection of the plant, and

WHEREAS, we as representatives of all Westchester County residents need to know that the federal and state governments are taking all appropriate measures to protect the nuclear plants, and

WHEREAS, any plan to safeguard our people must involve federal, state, county and local officials working together with clearly delineated responsibilities, now therefore be it

RESOLVED, we the members of the Westchester County Board of Legislators call on the governments of the United States of America and the State of New York to develop a comprehensive plan to properly defend the Indian Point nuclear plants from all potential areas of attack, and

RESOLVED, we further call upon the appropriate Federal and State officials, within the context of national security concerns, to assure that coordinated actions are being taken to protect our installations and facilities and to safeguard our citizenry, and

RESOLVED, that the above mentioned governments immediately and permanently deploy all appropriate military resources, including anti-aircraft and anti-ship weaponry, as well as necessary United States military and New York State Guard personnel to properly defend the plants from any and all attacks, and

RESOLVED that this resolution be transmitted to the President of the United States, the Governor of the State of New York and to all our Federal and State representatives.

Dated: October 29, 2001

White Plains, New York

**LIST OF GOVERNMENT BODIES THAT HAVE PASSED RESOLUTIONS
CALLING FOR THE CLOSURE OF THE INDIAN POINT PLANTS :**

(As of February 2005)

NEW YORK CITY COMMUNITY BOARDS:

- Community Board # 1, Bronx
- Community Board # 5, Bronx
- Community Board # 11, Bronx
- Community Board # 2, Brooklyn
- Community Board # 3, Brooklyn
- Community Board # 6, Brooklyn
- Community Board # 7, Brooklyn
- Community Board # 8, Brooklyn
- Community Board # 2, Manhattan
- Community Board # 3, Manhattan
- Community Board # 4, Manhattan
- Community Board # 7, Manhattan
- Community Board # 5, Queens
- Community Board # 7, Queens

COUNTIES:

- Putnam County, New York
- Rockland County, New York
- Westchester County, New York
- Bergen County, New Jersey
- Hudson County, New Jersey

MUNICIPALITIES IN WESTCHESTER COUNTY, NEW YORK:

- Bedford
- Croton-on-Hudson
- Greenburgh
- Hastings-On-Hudson
- Irvington
- Lewisboro
- Mamaroneck
- New Castle
- New Rochelle
- North Castle
- North Salem
- Pleasantville
- Somers
- Tarrytown
- Yorktown

MUNICIPALITIES IN ROCKLAND COUNTY, NEW YORK:

- Nyack
- Town of Ramapo
- South Nyack
- Town of Stony Point
- Town of Clarkstown
- Town of Haverstraw
- Town of Orangetown

MUNICIPALITIES IN PUTNAM COUNTY, NEW YORK:

- Town of Garrison

MUNICIPALITIES IN ORANGE COUNTY, NEW YORK:

- Town of Highlands

MUNICIPALITIES IN ULSTER COUNTY, NEW YORK:

- Town of New Paltz
- Town of Rochester
- Town of Rosendale
- Village of New Paltz
- Town of Saugerties
- Town of Woodstock

MUNICIPALITIES IN HUDSON COUNTY, NEW JERSEY:

- Harrison
- Hoboken
- Kearny

MUNICIPALITIES IN BERGEN COUNTY, NEW JERSEY:

- Edgewater
- Englewood
- Hackensack
- Ho-Ho-Kus
- Montvale
- Moonachie
- Oradell
- Paramus
- Park Ridge
- Teaneck
- Tenafly

MUNICIPALITIES IN ESSEX COUNTY, NEW JERSEY:

- Newark

MUNICIPALITIES IN FAIRFIELD COUNTY, CONNECTICUT:

- Town of New Caanan
- City of Stamford

GOVERNMENT BODIES THAT HAVE PASSED A RELICENSING

RESOLUTION:

(As of Feb. 2005)

- 1) COUNTY OF WESTCHESTER, NEW YORK
- 2) VILLAGE OF PIERMONT, NEW YORK
- 3) BOROUGH OF TENAFLY, NEW YORK
- 4) COUNTY OF ROCKLAND, NEW YORK
- 5) VILLAGE OF PORTCHESTER, NEW YORK
- 6) TOWN OF RAMAPO, NEW YORK
- 7) TOWN OF POUND RIDGE, NEW YORK
- 8) VILLAGE OF IRVINGTON, NEW YORK
- 9) TOWN OF BEDFORD, NEW YORK
- 10) HASTINGS-ON-HUDSON, NEW YORK
- 11) TOWN OF LEWISBORO, NEW YORK
- 12) VILLAGE OF MAMARONECK, NEW YORK
- 13) VILLAGE OF RYE BROOK, NEW YORK
- 14) CROTON-ON-HUDSON, NEW YORK
- 15) TOWN OF GREENBURGH, NEW YORK
- 16) TOWN OF NEW CASTLE, NEW YORK
- 17) COUNTY OF HUDSON, NEW JERSEY
- 18) TOWN OF HARRISON, NEW JERSEY
- 19) NEWARK, NEW JERSEY
- 20) ULSTER COUNTY

Supporting The Westchester County Board Of Legislators Resolution No. 269-2003, Calling On The Nuclear Regulatory Commission (NRC) To Reject The Re-licensing Of Entergy Corp's Indian Point 2 And 3 Nuclear Power Plants Located In Buchanan, New York

Legislators Zimet, Bartels, Berardi, Dart, Donaldson, Feldmann, Hyatt, Kraft, Lomita, Loughran, R.A. Parete, R.S. Parete, Provenzano, Rodriguez, Shapiro, Stoeckeler and Stock offer the following:

WHEREAS, the Westchester County Board of Legislators passed Resolution No. 269-2003 calling on the Nuclear Regulatory Commission (NRC) to reject the re-licensing of Entergy Corp's Indian Point 2 and Indian Point 3 Nuclear Power Plants located in Buchanan, New York, and

WHEREAS, the current licenses of Indian Point 2 and 3 expires in 2013 and 2015 respectively, and Entergy Corp has indicated a desire to seek a 20 year license extension, and

WHEREAS, over 400 Democrat and Republican elected officials have called for the closure of Indian Point, and

WHEREAS, the Westchester County Board of Legislators requested the Ulster County Legislature to consider going on record as opposing a long drawn out re-licensing but rather join all appropriate and concerned parties in planning for the plants eventual closing and decommissioning, and work towards a non-nuclear future at the Indian Point site, and

WHEREAS, the Ulster County Legislature voted to refer this issue to the Criminal Justice/Public Safety/DWI Committee and upon review the Committee requested the presentation be made to the entire Legislature, and

WHEREAS, at a joint caucus of the Ulster County Legislature on February 2, 2005 at 6:00 PM, an informational meeting was held per the Committee's request, and

WHEREAS, for a third year in a row, since the release of the Witt report, Westchester County Executive Spano, Rockland County Executive Vanderhoef and Orange County Executive Diana have again chosen to protect the health, welfare and safety of their residents living in the emergency planning zone by refusing to submit their Annual Certification Letters for Indian Point's emergency evacuation plans, and

WHEREAS, new concerns about the evacuation plans has arisen due to numerous Indian Point sirens inability to rotate and alert all the public in case of an emergency, and

Resolution No. 95 February 10, 2005

**Supporting The Westchester County Board Of Legislators
Resolution No. 269-2003, Calling On The Nuclear Regulatory
Commission (NRC) To Reject The Re-licensing Of Entergy Corp's
Indian Point 2 And 3 Nuclear Power Plants Located In Buchanan,
New York**

WHEREAS, there is no emergency back-up power to operate the sirens and therefore, in the event of an emergency situation during a power outage, there would be no way to notify the public, and

WHEREAS, if plant owner first applied for a license to operate a nuclear power plant at the Indian Point site today, it would not likely be granted by the NRC under its current standards and regulations that specifically prohibit the siting of nuclear power plants based on population density surrounding the site, and

WHEREAS, the Ulster County Legislature unanimously passed Resolution No. 188 for purposes of protecting our first responders from the hazards of Depleted Uranium, and

WHEREAS, the dangers to our first responders as well as the general public would be catastrophic if an accident was to happen at Indian Point.

RESOLVED, the Ulster County Legislature give the requested support to the elected leaders of a neighboring county concerned with the safety and welfare of its citizenry, and

FURTHER RESOLVED, that the Ulster County Legislature vote to support Westchester County Resolution No. 269-2003 on behalf of the safety and welfare of all Ulster County residents,

and moves its adoption.

ADOPTED BY THE FOLLOWING VOTE:

AYES: 26

NOES: 6

(Legislators: Cummings, DePew,
Gerentine, Hathaway, Meyer,
and Noonan)

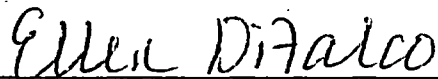
(Legislator Tipp left at 7:17 P.M.)

FINANCIAL IMPACT:
NONE

ULSTER COUNTY LEGISLATURE} SS.:

I have compared the preceding Resolution, adopted at a Regular Session held February 10, 2005 with the original thereof, on file in this office and do hereby CERTIFY that the same is a correct transcript thereof, and of the whole of said Resolution.

WITNESS my hand and seal of the Ulster County Legislature, at the City of Kingston, Ulster County, New York, this 11th Day of February in the year Two Thousand and Five.



Ellen DiFalco, Clerk
Ulster County Legislature

ULSTER COUNTY LEGISLATURE

PO BOX 1800, Kingston, NY 12402



Telephone: 845 840-3900
FAX: 845 840-3651

LEGISLATOR

March 2, 2005

On February 10, 2005 The Ulster County Legislature passed Resolution # 95 supporting The Westchester County Board of Legislators Resolution No. 269-2003, calling on the Nuclear Regulatory Commission (NRC) to reject the re-licensing of Entergy Corp's Indian Point 2 and 3 Nuclear Power Plants located in Buchanan. New York. (Resolution included)

As Majority Leader of the Ulster County Legislature, I request on behalf of our constituents, that you take the request as seriously as we do.

Thank you for your time.

Sincerely,

A handwritten signature in black ink, appearing to read "Mike Stock", is written over the word "Sincerely,".

Michael Stock

Majority Leader, Ulster County Legislature, New York

**Supporting The Westchester County Board Of Legislators
Resolution No. 269-2003, Calling On The Nuclear Regulatory
Commission (NRC) To Reject The Re-licensing Of Entergy Corp's
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Resolution No. 95 February 10, 2005

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and Noonan)

(Legislator Tipp left at 7:17 P.M.)

FINANCIAL IMPACT:
NONE

0235